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MARKETING and TRANSPORTATION SITUATION



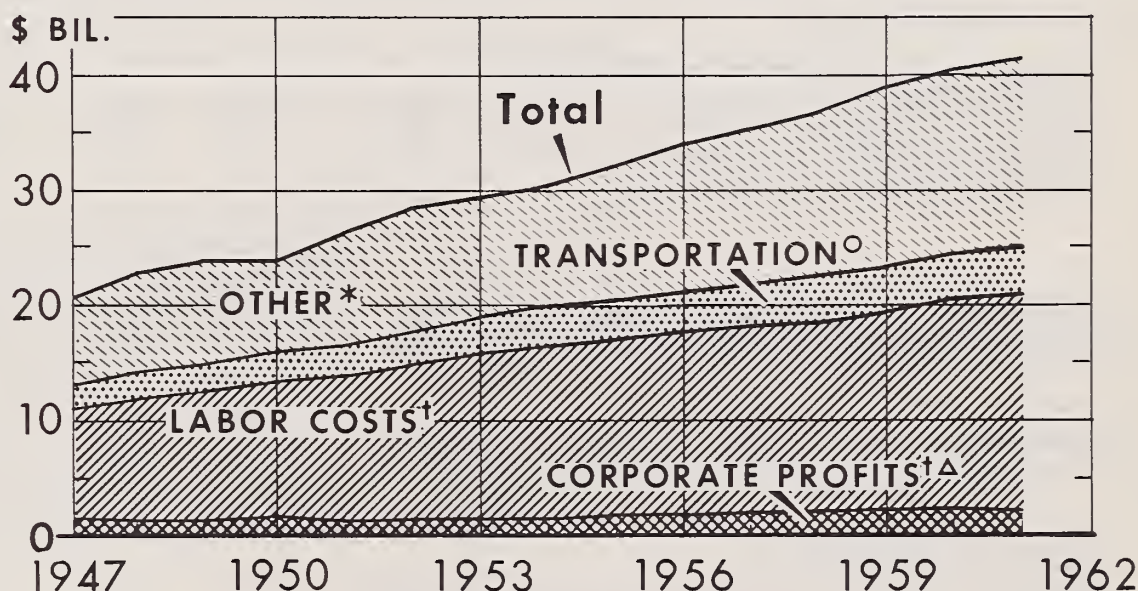
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AUGUST 1962

The bill for marketing domestic farm-originated food products bought by civilian consumers in this country has risen each year since 1950. It reached \$41.4 billion in 1961 -- 73 percent higher than in 1950. This increase resulted from rising marketing charges per unit of product marketed and increases in volume of marketings. All components of the marketing bill increased. In 1961 labor costs accounted for 46 percent of the total marketing bill, rail and truck transportation charges for 10 percent, corporate profits before income taxes for 5 percent, and other costs and noncorporate profits for 39 percent.

TOTAL FARM FOOD MARKETING BILL



FOR DOMESTIC FARM FOODS BOUGHT BY U. S. CIVILIAN CONSUMERS
* OTHER COSTS AND NONCORPORATE PROFITS
† EXCLUDES INTERCITY TRANSPORTATION FIRMS
○ INTERCITY RAIL AND TRUCK ONLY
△ PROFITS BEFORE TAXES

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 706-62 (7) ECONOMIC RESEARCH SERVICE

IN THIS ISSUE

- Farm-Food Marketing Bill
- Concentration and Ownership in Food Industries.
- Marketing Food in Jamaica
- Advertising Expenditures

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STATISTICAL SUMMARY OF MARKET INFORMATION

Item	Unit or base period	1961			1962	
		Year	Apr.-June	Oct.-Dec.	Jan.-Mar.	Apr.-June
<u>Farm-to-retail price spreads</u>						
Farm-food market basket: <u>1/</u>						
Retail cost	Dol.	1,060	1,062	1,049	1,062	1,066
Farm value	Dol.	404	400	398	414	403
Farm-retail spread	Dol.	656	662	651	648	663
Farmer's share of retail cost	Pct.	38	38	38	39	38
Cotton: <u>2/</u>						
Retail cost	Dol.	2.19	2.18	2.19	2.15	---
Farm value	Dol.	.31	.31	.33	.33	---
Farm-retail spread	Dol.	1.88	1.87	1.86	1.82	---
Farmer's share of retail cost	Pct.	14	14	15	15	---
Cigarettes: <u>3/</u>						
Retail cost	Ct.	27.6	---	---	---	---
Farm value	Ct.	4.23	---	---	---	---
Federal and State excise taxes	Ct.	12.4	---	---	---	---
Farm-retail spread excluding excise taxes	Ct.	11.0	---	---	---	---
Farmer's share of retail cost	Pct.	15	---	---	---	---
<u>General economic indicators</u>						
Consumers' per capita income and expenditures: <u>4/</u>						
Disposable personal income	Dol.	1,979	1,969	2,015	2,024	2,049
Expenditures for goods and services	Dol.	1,840	1,830	1,871	1,887	1,906
Expenditures for food	Dol.	386	384	388	394	---
Expenditures for food as percentage of disposable income	Pct.	19.5	19.5	19.3	19.5	---
		1961		1962		
		Year	June	April	May	June
Hourly earnings, production workers, manufacturing: <u>5/</u>	Dol.	2.32	2.32	2.39	2.39	2.39
Hourly earnings of food marketing employees <u>6/</u> ...	Dol.	2.04	2.04	2.09	2.11	---
Retail sales: <u>7/</u>						
Food stores	Mil. dol.	4,618	4,622	4,787	4,801	4,709
Apparel stores	Mil. dol.	1,144	1,136	1,207	1,196	1,116
Manufacturers' inventories: <u>7/</u>						
Food and beverage	Bil. dol.	5.24	5.05	5.32	5.34	5.39
Textile	Bil. dol.	2.74	2.75	2.80	2.84	2.86
Tobacco	Bil. dol.	2.17	1.96	2.17	2.18	2.18
Indexes of industrial production: <u>8/</u>						
Food and beverage manufactures	1957=100	113	113	116	116	---
Textile mill products.....	1957=100	111	112	121	122	---
Apparel products	1957=100	124	123	129	128	---
Tobacco products	1957=100	118	116	122	---	---
Index of physical volume of farm marketings	1947-49=100	136	120	98	110	118
<u>Price indexes</u>						
Consumer price index <u>5/</u>	1957-59=100	104.2	104.0	105.2	105.2	105.3
Wholesale prices of food <u>5/</u>	1957-59=100	99.9	98.3	99.7	99.3	99.0
Wholesale prices of cotton products <u>5/</u>	1957-59=100	100.4	99.2	102.4	102.0	102.0
Wholesale prices of woolen products <u>5/</u>	1957-59=100	97.1	97.1	98.6	98.9	99.0
Prices received by farmers <u>2/</u>	1957-59=100	99	97	100	100	99
Prices paid by farmers, interest, taxes, and wage rates <u>2/</u>	1957-59=100	103	103	105	105	104

1/ Average quantities of farm food products purchased per wage-earner or clerical-worker family in 1952. 2/ Data for average family purchases in 1950 of 25 articles of cotton clothing and housefurnishings divided by number of pounds of lint cotton required for their manufacture; see U.S. Dept. Agr. Mktg. Res. Rpt. 277. 3/ Preliminary data for package of regular-sized, popular brand cigarettes; farm value is return to farmer for 0.065 lb. of leaf tobacco of cigarette-types; data for fiscal year beginning July 1, 1961. 4/ Seasonally adjusted annual rates, calculated from Dept. of Commerce revised data. Second quarter 1962 data are from preliminary estimates by the Council of Economic Advisers. 5/ Dept. Labor. 6/ Weighted composite earnings in food processing, wholesale trade, retail food stores, calculated from data of Dept. Labor. 7/ Seasonally adjusted, Dept. Commerce. Sales data for 1961 are averages of monthly totals (unadjusted). Inventory data for 1961 are book values at end of year (adjusted). 8/ Seasonally adjusted, Board of Governors of Federal Reserve System. 9/ Converted from 1910-14 base.

THE MARKETING AND TRANSPORTATION SITUATION

Approved by the Outlook and Situation Board August 1, 1962

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SUMMARY

Retail prices of domestic farm-originated food products in the second quarter this year averaged about the same as a year earlier. A small increase in the level of prices farmers received for these products caused mainly by higher prices for beef cattle, was partly offset by a decline in marketing charges.

Retail prices of these products likewise averaged about the same in the quarter just ended as in January-March this year. Prices farmers received were down 2 percent from the first quarter, reflecting

mainly lower prices for beef cattle, hogs, milk, chickens, and eggs. This decrease in farm prices was offset by a rise of 2 percent in marketing charges, most of which resulted from higher marketing charges for meat products, fruits, and vegetables.

Farmers received 38 cents of each dollar consumers spent for farm foods in retail food stores in April-June of this year, 1 cent less than in the preceding quarter but the same share as in the second quarter last year.

Highlights of Special Articles

The total bill for marketing domestic farm food products sold to civilian consumers in this country totaled \$41.4 billion in 1961, about 2 percent more than in 1960. This rise, which was smaller than the average annual increase since 1950, resulted from expansion in the volume of products marketed and a slight increase in marketing charges per unit of product. Consumer expenditures and farmers' re-

ceipts for these products also rose slightly from 1960 to 1961.

Steady annual increases in unit marketing charges and almost steady gains in the volume of products marketed raised the marketing bill by about three-fourths from 1950 to 1961. The rise in unit marketing charges reflects increases in costs

and marketing services. Profits per unit of product have fluctuated and were lower in 1961 than in 1950. Farmers' total receipts from these products rose much less than the marketing bill, and the rise in receipts resulted entirely from increased marketings. (The Farm Food Marketing Bill, pp. 10-19).

Leading firms in most food manufacturing industries had about the same proportion of industry shipments in 1958 as in 1947. The proportion of total shipments made by the 4 largest firms in each of 11 industries manufacturing farm-food products increased from 1947 to 1958. The largest increase was in the flour mixes industry -- from 41 percent in 1947 to 75 percent in 1958. The smallest increase -- 2 percentage points -- occurred in each of these 5 industries, the 4 largest firms had less than 40 percent of the total shipments. In each of 13 other farm-food manufacturing industries, the proportion of shipments made by the 4 largest firms declined during this 11-year period. Decreases ranged from 1 percentage point in the cane sugar refining industry to 20 percentage points in the poultry dressing plants industry. These are among the findings in a recent report, Concentration Ratios in American Industry, prepared by the Bureau of the Census for the Senate Antitrust and Monopoly Subcommittee. The trend toward increased ownership of establishments by multiunit firms continued in the food manufacturing industries between 1947 and 1958. Establishments operated by multiunit firms in the food and kindred products industry group accounted for 69 percent of the total value added by manufacturing in 1958, up from 65 percent in 1954 and 61 percent in 1947. The type of organization of firms did not change much in the food manufacturing industries. Corporations owned 52 percent of the establishments in the food and kindred products industry group in 1958 compared with 49 percent in 1947. (Concentration and Ownership in Food Manufacturing Industries, pp. 20-27).

A study made recently of the marketing of agricultural products on the island of Jamaica may have application to conditions in other developing countries. The study reveals that the Jamaican economy has made remarkable progress since World War II. However, the output of agricultural products has decreased, necessitating an increase in food imports to feed a growing population. Hundreds of agricultural products, produced mainly on small farms, are marketed through various organizations in which the higgler is predominant. The higgler is typically a farmer's wife who sells at public farmers' markets. While physical marketing facilities are fairly adequate, substantial improvements are needed in the areas of marketing information, pricing practices, and marketing costs. These deficiencies also indicate the direction of marketing improvements needed. The two major needs are: (1) Establishment of an organization to give systematic and continuing direction to bettering commercial marketing operations; and (2) improved appraisal of market prospects for the various products which can be grown. In addition, marketing would be improved by an expanded research program and consolidation of governmental activities pertaining to agricultural production and marketing. (Marketing Food Domestically in Jamaica, pp 28-38).

Corporations manufacturing food products in this country spent \$1.1 billion for advertising in 1961. Food retailing corporations spent an estimated \$267 million last year -- more than four times the 1950 expenditure. Such retail growth reflected increases in the number and size of corporate retail food stores. Food wholesaling corporations boosted their advertising expenditures at a slower pace -- from about \$65 million in 1950 to \$102 million in 1961. Among the food manufacturing industries, increases in advertising expenditures were particularly marked in canning, baking, and dairy products. (Advertising Expenditures by Food Marketing Corporations, 1950-51, and 1953-61, pp. 39-40).

FARM-RETAIL SPREADS FOR FARM FOOD PRODUCTS

Farm Value Down 2 Percent From First Quarter; Farm-Retail Spread Up 2 Percent

The farm value of the market basket of farm foods averaged \$403 (annual rate) in the second quarter, 2 percent below the first quarter average (table 16, p. 42). ^{1/} The spread or marketing margin was \$662 (annual rate), the third highest quarterly average on record and 2 percent higher than in the first quarter (table 17, p. 43). The combination of an increase in the spread and a decrease in the farm value left the retail cost about unchanged at an annual rate of \$1,066. Since the second quarter of 1960, this retail cost has fluctuated within the narrow range of \$1,049 to \$1,068.

Declines in farm prices of beef cattle, hogs, milk, chickens, and eggs accounted for most of the decrease in the farm value. These decreases were somewhat

offset by an 8 percent increase in the farm value of fruits and vegetables.

Practically all of the increase in the farm-retail spread was attributed to the meat products and fruits and vegetables groups. The only other significant changes among the product groups were a 4 percent decrease for the poultry and eggs group and a 2 percent increase for fats and oils.

The only significant changes in retail costs of the products groups were decreases for dairy products and poultry and eggs and an increase for fruits and vegetables. The retail cost of the market basket did not vary by more than 1 percent during the first 6 months of this year (table 1).

Little Change in Spread, Farm Value, and Retail Cost From Year Earlier

Both components of the market basket retail cost in the second quarter this year averaged about the same as a year earlier (table 2). A small increase in the farm value was about offset by a decline in the farm-retail spread, leaving the retail cost scarcely changed.

Changes in the farm values of the product groups from a year ago were larger than for the market basket total. The farm value of meat products rose 6 percent from the second quarter last year, and the farm value of bakery and cereal

products rose 7 percent. But these increases were partly offset by small decreases for the dairy products and poultry and eggs groups and a 19 percent decrease for fats and oils.

The farm-retail spread for meat products declined 5 percent; the spread for the fats and oils group increased 10 percent. Changes for other product groups were small. There were a few minor changes in the retail costs of major product groups; the largest was a 3 percent decrease for poultry and eggs.

^{1/} The "market basket" contains the average quantities of domestic farm-originated food products purchased per family in 1952 for consumption at home by urban wage-earner and clerical-worker families. Additional information concerning the contents of the market basket and methods of estimating market-basket data are given in Farm-Retail Spreads for Food Products, USDA Misc. Pub. 741, November 1957. Since the market basket does not contain imported foods or fishery products and other foods of nonfarm origin or the cost of meals in eating places, its retail cost is less than the cost of all foods bought per family. The farm value is the return to farmers for the farm products equivalent to the foods in the market basket. The farm-retail spread is the difference between the retail cost and farm value. It is an estimate of the charges made by marketing firms for assembling, processing, transporting, and distributing the products in the market basket.

Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1947-62 1/

Year and Month	Retail cost <u>2/</u>	Farm value <u>3/</u>	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
1947-49 average	940	466	474	50
1950	920	432	488	47
1951	1,024	497	527	49
1952	1,034	482	552	47
1953	1,003	445	558	44
1954	986	421	565	43
1955	969	395	574	41
1956	972	390	582	40
1957	1,007	401	606	40
1958	1,054	430	634	40
1959	1,040	398	642	38
1957-59 average	1,037	410	627	40
1960	1,053	407	646	39
1961 <u>4/</u>	1,060	404	656	38
<u>1961 4/</u>				
January	1,068	418	650	39
February	1,070	424	646	40
March	1,068	415	653	39
April	1,068	409	659	38
May	1,060	398	662	38
June	1,059	393	666	37
July	1,066	396	670	37
August	1,060	402	658	38
September	1,058	402	656	38
October	1,054	396	658	38
November	1,045	395	650	38
December	1,047	404	643	39
<u>1962 4/</u>				
January	1,057	411	646	39
February	1,055	416	649	39
March	1,064	414	650	39
April	1,066	409	657	38
May	1,063	401	662	38
June	1,068	401	667	38

1/ The farmer's share and index numbers of the retail cost, farm value, and farm-retail spread for the years 1913-61 (1957-59=100) are published in the February 1962 Marketing and Transportation Situation (MTS-144), p. 50. 2/ Retail cost of average quantities purchased per family in 1952 by urban wage-earner and clerical worker families, calculated from retail prices collected by the Bur. Labor Statistics. 3/ Payment to farmers for equivalent quantities of farm produce minus imputed value of byproducts obtained in processing. 4/ Preliminary estimates.

: Current data are given in the Statistical Summary. :
: a monthly publication of the Statistical Reporting Service.:

Table 2.--The market basket of farm foods: Retail cost, farm value, farm-retail spread, April-June, 1962 and 1961

Item	Apr.- June 1962	Apr.- June 1961	Change: Apr.-June 1962 from Apr.-June 1961	
			Actual	Percentage
	Dollars	Dollars	Dollars	Percent
Retail cost				
Market basket	1,065.56	1,062.43	3.13	1/
Meat products	277.72	276.22	1.50	1
Dairy products	198.41	200.38	-1.97	-1
Poultry and eggs	80.53	82.96	-2.43	-3
Bakery and cereal products	169.98	167.73	2.25	1
All fruits and vegetables	250.21	246.35	3.86	2
Fats and oils	43.80	43.82	-.02	1/
Miscellaneous products	44.91	44.97	-.06	1/
Farm value				
Market basket	403.48	399.77	3.71	1
Meat products	144.27	136.34	7.93	6
Dairy products	85.82	87.64	-1.82	-2
Poultry and eggs	46.73	48.66	-1.93	-4
Bakery and cereal products	31.52	29.38	2.14	7
All fruits and vegetables	76.10	75.98	.12	1/
Fats and oils	11.80	14.64	-2.84	-19
Miscellaneous products	7.23	7.13	.10	1
Farm-retail spread				
Market basket	662.08	662.66	-.58	1/
Meat products	133.45	139.88	-6.43	-5
Dairy products	112.59	112.74	-.15	1/
Poultry and eggs	33.80	34.30	-.50	-1
Bakery and cereal products	138.46	138.35	.11	1/
All fruits and vegetables	174.11	170.37	3.74	2
Fats and oils	32.00	29.18	2.82	10
Miscellaneous products	37.68	37.84	-.16	1/
Farmer's share of retail cost				
	Percent	Percent	Percentage point	
Market basket	38	38	0	
Meat products	52	49	3	
Dairy products	43	44	-1	
Poultry and eggs	53	59	-1	
Bakery and cereal products	19	18	1	
All fruits and vegetables	30	31	-1	
Fats and oils	27	33	-6	
Miscellaneous products	16	16	0	

1/ Less than 0.5 percent.

Beef was the major cause of changes in the meat products group. The farm value of Choice grade beef averaged 49.8 cents per retail pound in the second quarter this year, 11 percent higher than in the same period last year (table 3). This increase was accompanied by a 10 percent decline in the farm-retail spread. Both the farm-wholesale and wholesale-retail segments of the spread declined. The increase in the farm value and decrease in the spread left the retail price of beef at 80.5 cents, 2 percent higher than a year earlier.

Both the farm value and retail price of lamb increase 9 percent from the relatively low levels of the second quarter of 1961 to the same quarter this year; the spread increased 10 percent.

During the first half of this year, the market basket retail cost, farm value, and farm-retail spread all averaged nearly the same as in the first half of 1961.

Farmer's Share Down From First Quarter

The farmer's share of the retail cost of the market basket was 38 percent in the April-June quarter this year, down 1 point from the share in the January-March quarter. It was also 38 percent in the second quarter last year. Since

the last quarter of 1958, the quarterly average farmer's share has fluctuated between 38 and 39 percent, except in the fourth quarter of 1959 when it reached a postwar low of 37 percent.

Farm Prices of Eggs and Frying Chickens Decline Sharply From First Quarter

Prices received by farmers for frying chickens dropped 11 percent from the first to the second quarter, but were still 4 percent above the low prices received in the second quarter of 1961. Much of this reduction was passed along to consumers, as retail prices declined 5 percent from the January-March quarter. The farm-retail spread was 3 percent higher than in the first quarter and 1 percent higher than a year earlier.

period last year, so prices are not expected to reach the extremely low levels of a year ago.

Egg prices, both farm and retail, in the second quarter this year were 8 and 7 percent, respectively, below a year earlier. Consumption per capita is running slightly below a year earlier, which indicates that at least part of the price decline can be attributed to a decline in demand. The outlook for egg prices the rest of this year -- lower than in 1961.

Production of frying chickens probably will be about 5 percent smaller in the third quarter this year than in the same

Farm Value of Fats and Oils Group Declines

The farm value of the fats and oils group in April-June 1962 was down 19 percent from a year ago, mainly because of the considerable decrease in the farm price of soybeans from the relatively high level last year.

Almost all of this decrease in the farm value of the fats and oils group was absorbed by an increase in the farm-retail spread, so the retail cost of this group was about the same in the second quarter this year as in the same quarter of 1961.

Table 3.--Beef, pork, and lamb: Retail price, wholesale value, farm value, farm-retail spread, and farmer's share of retail price by quarters, 1961-62

Year and quarter	Retail price per pound ^{1/}	Wholesale value ^{2/}	Gross farm value ^{3/}	Byproduct allowance ^{4/}	Net farm value ^{5/}	Farm-retail spread			Farmer's share
						Total	Wholesale-retail	Farm-wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
Beef, (Choice grade)									
1961									
Jan.-Mar.	81.7	60.1	54.1	4.3	49.8	31.9	21.6	10.3	61
Apr.-June	79.1	55.0	49.5	4.7	44.8	34.3	24.1	10.2	57
July-Sept.	76.9	54.3	48.8	4.8	44.0	32.9	22.6	10.3	57
Oct.-Dec.	78.9	57.0	52.0	4.7	47.3	31.6	21.9	9.7	60
1962									
Jan.-Mar.	80.6	59.8	55.4	4.6	50.8	29.8	20.8	9.0	53
Apr.-June	80.5	59.4	54.6	4.8	49.8	30.7	21.1	9.6	62
Pork, (retail cuts)									
1961									
Jan.-Mar.	59.6	43.2	37.0	5.5	31.5	28.1	16.4	11.7	53
Apr.-June	58.3	41.1	35.4	5.1	30.3	28.0	17.2	10.8	52
July-Sept.	60.1	43.7	38.1	4.9	33.2	26.9	16.4	10.5	55
Oct.-Dec.	58.9	41.6	35.0	4.3	30.7	28.2	17.3	10.9	52
1962									
Jan.-Mar.	57.9	41.8	35.3	4.6	30.7	27.2	16.1	11.1	53
Apr.-June	57.8	40.9	34.2	4.4	29.8	28.0	16.9	11.1	52
Lamb, (Choice grade)									
1961									
Jan.-Mar.	67.7	43.7	40.1	6.1	34.0	33.7	24.0	9.7	50
Apr.-June	64.6	43.4	37.2	4.7	32.5	32.1	21.2	10.9	50
July-Sept.	65.2	44.1	37.0	4.7	32.3	32.9	21.1	11.8	50
Oct.-Dec.	66.1	43.3	36.5	5.4	31.1	35.0	22.8	12.2	47
1962									
Jan.-Mar.	67.4	42.8	39.3	7.1	32.2	35.2	24.6	10.6	48
Apr.-June	70.6	48.2	41.9	6.5	35.4	35.2	22.4	12.8	50

^{1/} Estimated weighted average price of retail cuts.

^{2/} Wholesale value of quantity of carcass equivalent to 1 lb. of retail cuts: Beef, 1.35 lb.; pork, 1.00 lb.; lamb, 1.11 lb.

^{3/} Payment to farmer for quantity of live animal equivalent to 1 lb. of retail cuts: Beef, 2.25 lb.; pork, 2.13 lb.; lamb, quantity varies by months from 2.28 lb. in June to 2.42 lb. in March.

^{4/} Portion of gross farm value attributed to edible and inedible byproduct.

^{5/} Gross farm value minus byproduct allowance.

Data for earlier years were published in The Marketing and Transportation Situation, May 1962, (MTS-145).

THE FARM FOOD MARKETING BILL^{1/}

The bill for marketing domestic farm-originated food products to civilian consumers in this country was \$41.4 billion in 1961, up about 2 percent from 1960, compared with an average annual increase of 5 percent for the period since 1950 (table 4). The bill has risen by almost three-fourths in the 11 years since 1950. Increases in volume of marketings and in marketing costs per unit of product have contributed almost equally to this rise.

The total marketing bill is the estimated total cost of assembling, transporting, processing, wholesaling, and retailing domestic farm-grown foods bought by civilians in this country. It is the difference between total civilian expenditures for these foods and payments to farmers -- the farm value -- for the equivalent quantity of farm products. Explicitly omitted are foods exported, used for nonfood purposes, and withheld from sale by farm families for their own use. An estimate of the higher retail cost of foods purchased in meals eaten away from home is included in the marketing bill. ^{2/}

Receipts by farmers for the farm equivalent of the same foods advanced slightly,

to \$20.8 billion, last year. Since 1950, receipts by farmers have risen much less than the marketing bill. Increased volume of products marketed has brought about the net gain in receipts for the period, as farm prices have dropped about 6 percent since 1950.

The part of total civilian expenditures for domestic farm-originated foods that was paid for marketing services (the marketing bill) increased from 58 percent of the total in 1950 to 67 percent in 1961.

Consumers spent \$62.2 billion for farm-food products in 1961 -- about 2 percent more than in 1960. These expenditures rose less than the marketing bill and less than their annual average increase of 4 percent for 1950-61. Small increases both in retail prices and in volume marketed contributed to the rise. Since 1950, total civilian expenditures for domestic farm foods have risen by one-half; approximately one-third of the increase is attributable to changes in price, two-thirds to changes in volume of products and services.

Marketing Charges and Volume Components of the Marketing Bill

The advance in the marketing bill from 1950 to 1961 resulted from a rise of about one-third in volume of products marketed and a rise of about the same proportion in marketing charges per unit of product.

From 1960 to 1961, volume and unit marketing charges increased less than the annual average rise since 1950, as did the total marketing bill.

^{1/} Prepared by Jeannette Findlay, statistical assistant, Marketing Economics Division, Economic Research Service, USDA.

^{2/} Another estimate of marketing charges -- the farm-retail marketing bill -- is for the same total quantity of food products, but assumes that all are sold at the retail store level. It is considered further in a later section of this article.

Table 4.-- The total marketing bill, farm value, and consumer expenditures for domestic farm food products bought by civilians, United States, 1929-61

Year	Total marketing bill <u>1/</u>	Farm value	Civilian expendi- tures for farm foods	Year	Total marketing bill <u>1/</u>	Farm value	Civilian expendi- tures for farm foods
	Billion dollars	Billion dollars	Billion dollars		Billion dollars	Billion dollars	Billion dollars
1929	9.7	7.2	16.9	1948	22.9	19.3	42.2
				1949	23.9	16.9	40.8
1930	9.9	6.4	16.3				
1931	8.6	4.7	13.3	1947-49 av. ...	22.5	18.3	40.8
1932	7.5	3.4	10.9				
1933	7.3	3.6	10.9	1950	23.9	17.6	41.5
1934	7.5	4.3	12.1	1951	26.4	20.0	46.4
1935	7.3	5.0	12.6	1952	28.3	19.8	48.1
1936	8.2	5.8	14.0	1953	29.2	19.1	48.3
1937	8.1	6.0	14.1	1954	30.0	18.4	48.4
1938	8.4	5.2	13.6	1955	32.0	18.3	50.3
1939	8.6	5.2	13.8	1956	33.7	18.7	52.4
				1957	35.2	19.5	54.7
1940	9.1	5.6	14.7	1958	36.8	20.8	57.6
1941	9.9	7.1	17.0	1959	39.2	20.0	59.2
1942	11.7	9.3	21.0				
1943	12.6	11.4	23.8	1957-59 av.	37.1	20.1	57.2
1944	13.3	11.6	24.4				
1945	14.9	12.6	26.8	1960	40.5	20.7	61.2
1946	18.3	15.7	33.5	1961 <u>2/</u>	41.4	20.8	62.2
1947	20.7	18.7	39.4	1962			

1/ Difference between civilian expenditures and farm value except that Federal processor taxes have been deducted for 1933-35 and allowances for Federal Government payments to processors have been added for 1943-46. Data for 1930 and 1952-60 have been revised.

2/ Preliminary.

Estimates in this table do not cover Alaska and Hawaii because of inadequate data.

Rising Unit Marketing Charges

The rise in unit marketing charges reflected mainly increases since 1950 in wage rates, transportation charges, and prices for machinery, equipment, fuel, containers, packaging materials, and other purchases by marketing firms, and taxes, rents, and other costs. Profits, before taxes, per unit of product marketed fluctuated from year to year. In 1960, profits per unit were almost the same as in 1950, but they fell about 5 percent last year (table 6).

Some of the rise in unit marketing charges resulted from increases in marketing operations per unit of product marketed. More operations are performed within the marketing system now than a decade ago. Operations previously performed by the farmer or left for the consumer have been shifted to the marketing system. Farm processing of dairy products has become of minor importance, for example. Foods are available to the housewife in stages of preparation increasingly closer to "ready to eat." Home canning has decreased in importance. On the other hand, some marketing

Table 5. --Labor, transportation, corporate profits, and other costs for marketing farm food products, United States, 1939-61 1/

Year	Labor <u>2/</u>	Rail and truck transportation <u>3/</u>	Corporate profits <u>4/</u>		Other <u>5/</u>	Total marketing bill
			Before taxes	After income taxes		
	Billion dollars	Billion dollars	Billion dollars	Billion dollars	Billion dollars	Billion dollars
1939.....	4.2	1.0	0.3	0.3	3.1	8.6
1940.....	4.5	1.1	.4	.3	3.1	9.1
1941.....	4.9	1.2	.6	.4	3.2	9.9
1942.....	5.3	1.0	.8	.4	4.6	11.7
1943.....	5.4	1.0	1.1	.5	5.1	12.6
1944.....	6.0	1.1	1.1	.5	5.1	13.3
1945.....	6.6	1.3	1.1	.5	5.9	14.9
1946.....	8.3	1.6	1.7	1.1	6.7	18.3
1947.....	9.7	2.0	1.5	1.0	7.5	20.7
1948.....	10.8	2.2	1.3	.8	8.6	22.9
1949.....	11.3	2.3	1.3	.7	9.0	23.9
1950.....	11.8	2.6	1.6	.9	7.9	23.9
1951.....	12.5	2.6	1.3	.6	10.0	26.4
1952.....	13.3	3.0	1.4	.6	10.6	28.3
1953.....	14.1	3.2	1.5	.7	10.4	29.2
1954.....	14.8	3.3	1.5	.7	10.4	30.0
1955.....	15.1	3.2	1.8	.9	11.9	32.0
1956.....	15.8	3.5	1.8	.9	12.6	33.7
1957.....	16.3	3.6	1.8	.8	13.5	35.2
1958.....	16.7	3.9	1.8	.8	14.4	36.8
1959.....	17.4	4.1	2.0	.9	15.7	39.2
1957-59 av.	16.8	3.9	1.8	.9	14.6	37.1
1960 <u>6/</u>	18.4	4.1	2.1	1.0	15.9	40.5
1961 <u>6/</u>	18.9	4.3	2.0	1.0	16.2	41.4

1/ For domestic farm foods bought by civilian consumers.

2/ Does not include the cost of labor employed in intercity for-hire transportation.

3/ Includes charges for the protective services, heating and refrigeration; does not include local hauling; charges for intercity transportation by water and air are a part of the "other" or residual component of the marketing bill.

4/ Does not include profits of unincorporated firms or firms engaged in intercity transportation.

5/ Residual component; includes other costs such as fuel, electric power, containers, packaging materials, air and water transportation, interest on borrowed capital, taxes other than those on income, and noncorporate profits.

6/ Preliminary.

Table 6.--Average hourly earnings and labor costs, profits, and marketing charges per unit of product for marketing farm food products, United States, 1939-61 1/

(Index numbers 1957-59 = 100)					
Year	Hourly earnings <u>2/</u>	Unit labor cost <u>3/</u>	Profit per unit of product <u>4/</u>		Unit marketing charges <u>5/</u>
			Before taxes	After taxes	
1939	28	41	31	52	45
1940	29	41	32	50	44
1941	31	44	49	65	44
1942	35	46	68	70	49
1943	37	48	88	82	52
1944	40	52	89	78	53
1945	43	55	83	78	53
1946	50	63	119	157	59
1947	57	73	104	139	71
1948	62	82	89	112	77
1949	65	84	87	109	79
1950	69	85	108	126	78
1951	73	91	90	87	84
1952	77	92	89	83	83
1953	82	95	94	91	89
1954	86	97	88	86	90
1955	88	95	103	106	92
1956	92	96	102	104	93
1957	97	98	99	97	97
1958	100	101	98	98	101
1959	102	101	103	104	102
1957-59 av.....	100	100	100	100	100
1960	108	104	106	107	103
1961 <u>6/</u>	112	104	101	102	105

1/ For domestic farm-produced foods bought by civilian consumers in this country.

2/ Hourly earnings estimated by dividing total labor cost by total man-hours for all workers. These data include proprietors and family workers not receiving stated remuneration and workers engaged in intercity rail and truck transportation.

3/ Unit labor cost is the quotient of the indexes of total labor cost and of volume of farm food products marketed to civilian consumers. The index of farm food products marketed was constructed by weighting the quantities sold by 1947-49 average retail prices.

4/ Profit per unit of product is the quotient of the index of total corporate profits from marketing farm foods produced and consumed in the United States and the index of the volume of farm food products marketed.

5/ Calculated from annual average spreads between retail cost of a constant market basket of farm food products and payments received by farmers for equivalent farm products; margin has been adjusted for subsidies to marketing firms. The farm-retail spreads are published in this Situation, table 1.

6/ Preliminary.

services, such as milk delivery to homes, have been reduced. Self-service and packaging in units of purchase have replaced many retail food store clerks; home delivery has largely become the customer's responsibility. Technological advances have provided some services formerly not available. Thus, the net marketing charge is the result of several changes which have partially offset each other.

Expansion in Volume

A 21 percent increase in the civilian population since 1950 accounted for part of

the one-third rise in volume of products marketed through 1961. An increase in consumer incomes, movement of population off farms, increasing use of purchased foods by farm as well as nonfarm families, and reduction of direct retailing by farmers also operated to place more food for civilian consumption in the marketing system.

Cost and Profit Components of the Total Marketing Bill

The labor, transportation, and corporate profits components of the marketing bill can be estimated separately. All other costs are included in a residual group.

Labor Costs

Labor costs for marketing domestic farm foods to civilian consumers were estimated at about \$19 billion in 1961 (table 5). These costs are the largest single component of the marketing bill, 46 percent in 1961 and 49 percent in 1950. They have risen in the aggregate every year since 1939. Since 1950, annual increases in total labor costs have averaged 4 percent. The change from 1960 to 1961 was smaller than average. In 1961, labor costs totaled 60 percent more than in 1950.

The labor cost component includes wages and salaries paid by assemblers, processors, wholesalers, and retailers (including eating places), and imputed payments to proprietors and family workers.^{3/} It also includes tips, supplements such as social insurance, workmen's compensation, and other "fringe benefits." It does not include labor costs of transportation firms.

Increases in the quantity of foods passing through the marketing system were responsible for about three-fifths of the increase in labor costs from 1950 to 1961. Rising labor costs per unit of product, largely the result of mounting wage rates and supplements, contributed the remaining two-fifths.

Hourly earnings of food marketing workers were 62 percent above the 1950 level in 1961 and rose 4 percent from 1960 to 1961 (table 6). But productivity increased such that fewer man-hours were required per unit of product; thus unit labor costs did not rise as much as hourly earnings. The 1961 average unit labor cost was 22 percent above that for 1950 and averaged the same as in 1960, though hourly earnings increased last year.

Transportation

The intercity transportation bill represents total charges by railroads and motor carriers for hauling the farm food products covered by the marketing bill. This transportation bill is estimated

^{3/} Many establishments that handle farm food products also handle nonfarm foods and other products. Their total labor cost, therefore, cannot be included in these estimates. In general, the proportion included is the percentage of the establishment's total sales or output represented by farm food products.

at \$4.3 billion in 1961, up 5 percent from 1960 (table 5). The rise resulted mainly from an increase in the volume of products hauled. Rail rates for food products averaged slightly lower last year than in 1960. Available information indicates that motor carriers' rates were about the same in 1961 as in 1960.

The transportation bill increased in most years from 1950 to 1961. In 1961, it was about two-thirds higher than in 1950. This rise was caused by higher rates, increased volume, and longer hauls.

Corporate Profits

Profits before taxes of corporate food marketing firms declined slightly in 1961 from the record level in 1960 (table 5). These profits were 25 percent higher in 1961 than in 1950. They dropped to a postwar low in 1951. Between 1951 and 1955, profits before taxes increased by nearly two-fifths, then leveled off in 1956-58. They increased again in 1959 and 1960.

As in most recent years, corporate profits after taxes in 1961 were about half as large as profits before taxes. In 1961, profits after taxes were 11 percent higher than in 1950.

Profits before taxes represented about 5 percent of the marketing bill in 1961, a little lower than the 7 percent in 1950. During the last decade, this percentage fluctuated between 4.8 and 5.6 percent.

Corporate profits before taxes per unit of food moving through the marketing system dropped from 106 (1957-59=100) in 1960 to 101 in 1961 and were 6 percent lower in 1961 than in 1950 (table 6). From 1950 to 1961, the index of profits before taxes per unit varied between 88 in 1954 and 108 in 1950. The record high was 119 in 1946. Profits after taxes per unit of product in 1961 were down 19 percent from the 1950 level.

In 1958, corporations accounted for 90 percent of the value added by food manufacturing establishments. Corporate establishments accounted for 54 percent of sales in retail food stores and 34 percent of sales by eating places. In the wholesale food trade, corporations contributed 66 percent of total sales. Thus, corporations received most of the profits earned from marketing the products covered by the marketing bill.

Profits of Leading Food Marketing Corporations.--Profits (after taxes on income) of 45 leading food manufacturing corporations were 2.3 percent of sales in 1961 compared with 2.4 percent in 1960 (table 7). This was the first decrease in the profit-sales ratio since 1957. The ratios of 7 baking companies and 11 meat packers declined rather sharply in 1961, while the ratio of a group of 9 miscellaneous food manufacturing companies increased slightly. Profits as a percentage of sales of 8 leading retail food chains averaged the same in 1961 as in 1960. This ratio has not changed since 1957.

As a percentage of stockholders' equity, profits (after taxes) of 50 leading food manufacturing corporations declined from 1960 to 1961. Again the ratios of 8 baking companies and 11 meat packers declined the most, while the ratio of the 9 miscellaneous food manufacturing companies increased a little. Profits of the 8 retail food chains amounted to 11.3 percent of stockholders' equity in 1961, down from 12.5 percent in 1960. During the 1950's, the highest profit percentage was achieved by these chains in 1957; since then, the percentage has declined steadily.

Other Costs and Noncorporate Profits 4/

Other costs and noncorporate profits, the residual group in the marketing bill, amounted to \$16.2 billion in 1961 compared with \$15.9 billion in 1960 and \$7.9

4/ This section and the estimates in table 8 were prepared by William T. Wesson, agricultural economist, Marketing Economics Division, Economic Research Service, USDA.

Table 8.--Net profits (less provision for taxes on income) as percentage of stockholders' equity and as percentage of sales, leading food and tobacco companies, 1935-61

Year	Food processing companies									
	8	7	11	5	10	9	50	5	8	5
	baking companies	grain mill products companies	meat packers	canning companies	dairy products companies	miscellaneous food companies	combined	wholesale food distributors	retail food chains	tobacco companies
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Profits as percentage of stockholders' equity ^{2/}										
Average										
1935-39 ...	8.1	9.7	3.6	5.6	7.9	9.8	7.2	---	8.4	13.9
1940-44 ...	8.7	9.6	7.4	8.6	10.5	9.3	8.9	---	8.5	11.5
1945-49 ...	15.9	13.8	7.4	11.0	13.5	11.9	11.4	17.0	15.5	12.9
1950	15.8	13.4	5.9	15.4	13.3	12.6	11.5	10.0	14.0	13.5
1951	11.9	11.0	5.0	6.9	10.3	9.0	8.5	9.4	10.1	9.9
1952	12.4	11.0	3.7	7.5	9.9	9.0	8.2	5.8	10.0	9.5
1953	12.7	10.7	6.6	6.6	11.1	9.3	9.2	7.6	11.4	10.1
1954	11.9	12.4	2.7	7.8	12.2	9.9	8.9	7.5	11.3	10.6
1955	12.0	12.4	6.5	10.1	12.0	10.4	10.2	6.7	11.2	12.0
1956	12.2	11.7	6.9	8.2	12.1	11.2	10.3	7.6	13.1	12.1
1957	12.6	12.8	3.9	5.9	11.8	11.4	9.6	7.6	14.2	12.8
1958	11.7	13.4	4.2	8.4	11.5	12.5	10.2	9.7	13.8	14.6
1959	11.8	11.7	7.4	8.2	11.3	12.6	10.6	8.1	12.9	14.8
1960	11.7	11.8	5.9	8.5	10.8	12.6	10.3	10.1	12.5	14.8
1961 ^{3/} ...	9.5	^{4/}	4.2	^{4/}	10.2	13.0	9.8	7.6	11.3	14.8
Profits as percentage of sales										
Average										
1935-39 ...	6.9	3.8	0.9	3.1	3.1	8.6	3.0	---	1.5	9.1
1940-44 ...	4.6	3.0	1.3	3.4	2.9	6.3	2.6	---	1.1	5.7
1945-49 ...	4.8	3.1	1.0	4.1	2.8	5.2	2.4	1.7	1.4	4.6
1950	4.9	3.1	.8	5.3	3.2	5.3	2.5	1.2	1.3	5.1
1951	3.5	2.3	.6	2.5	2.2	3.7	1.7	1.1	.9	3.8
1952	3.6	2.5	.4	2.7	2.1	3.6	1.6	.7	.8	3.4
1953	3.5	2.5	.8	2.3	2.3	3.6	1.9	1.0	1.0	3.8
1954	3.5	2.9	.3	2.8	2.6	3.8	1.9	1.0	1.0	4.3
1955	3.4	3.1	.8	3.6	2.6	4.0	2.2	.9	1.0	4.9
1956	3.4	2.9	.8	2.9	2.6	4.0	2.2	1.0	1.1	5.0
1957	3.4	3.4	.5	2.2	2.6	4.1	2.1	.9	1.2	5.2
1958	3.4	3.7	.5	3.0	2.6	4.3	2.2	1.2	1.2	5.7
1959	3.3	3.2	.9	3.0	2.6	4.3	2.4	1.1	1.2	5.8
1960	3.2	3.4	.8	3.2	2.6	4.4	2.4	1.2	1.2	5.9
1961 ^{3/} ...	2.7	^{4/}	.5	^{4/}	2.5	4.5	2.3	.9	1.2	6.0

^{1/} Includes sugar and corn refining companies, processors of vegetable oils, and companies manufacturing a wide variety of packaged foods. ^{2/} Ratio of net profits to average of stockholders' equity at the beginning and end of the year. Stockholders' equity is excess of total balance sheet assets over liabilities. ^{3/} Preliminary. ^{4/} Not available.

Compiled from Moody's Industrial Manual" and company annual reports.

billion in 1950 (table 5). This component accounted for about 39 percent of the marketing bill in 1961 and 33 percent in 1950. It includes costs of fuel, electric power, containers, packaging materials, intercity transportation other than by rail and truck, advertising, depreciation, interest, taxes (other than Federal income), rent, repairs, and other items not included in the rail and truck transportation, labor, and corporate profits components. The other costs component also includes profits of noncorporate firms.

It has been possible to estimate some of the individual items included in the other costs component for 1947-49 and 1960 (table 8). These items amounted to \$5.3 billion in 1960 or 152 percent greater than the 1947-49 average of \$2.1 billion. The total of these items in 1960 was about 13 percent of the marketing bill and 33 percent of other costs and noncorporate profits. The most significant of these cost items, in terms of magnitude, were advertising and depreciation. In 1960 each item amounted to about \$1.2 billion. Next in order of magnitude were taxes and rent.

The 152 percent increase between 1947-49 and 1960 in the total cost of these items conceals wide differences in the

rates of growth of the individual items. Rent increased 233 percent during this period, reflecting the phenomenal postwar growth in food retailing and accompanying increases in the use of rental equipment and facilities. Depreciation increased by 204 percent. This resulted from a combination of an increase in depreciable assets and more liberalized depreciation allowances. Interest increased 184 percent, mainly as a consequence of increased capital requirements and to some extent higher interest rates. Increases for other items were: Advertising, 160 percent; taxes, 124 percent; and repairs, contributions, etc., 91 percent.

The proportions that the individual items were of the total cost changed between 1947-49 and 1960. Slight increases occurred in the proportion accounted for by advertising, depreciation, interest, and rent, whereas the shares of the remaining items declined.

Cost items considered here grew more rapidly than the total of the other items in the other cost component. As noted, the total of the specified items increased 152 percent from 1947-49 to 1960. In contrast, the total of the unspecified items in the group increased 71 percent.

The Farm-Retail Marketing Bill

The farm-retail marketing bill includes all domestic farm-originated food products bought by civilian consumers in this country -- the same food products covered by the total marketing bill. But the farm-retail marketing bill is the difference between the farm value of these products and their value in terms of retail food store prices. Unlike the total marketing bill, it does not include the extra costs of food eaten in restaurants and other eating places or any allowance for marketing charges saved by purchasing at less than retail prices.

Farm-retail marketing bill data, but not total marketing bill data, are available for product groups (table 9). Restaurants'

service costs for individual product groups cannot be estimated accurately, because data on the flow of individual foods through eating places are not available.

The farm-retail marketing bill rose about 2 percent from 1960 to 1961, as did the total marketing bill. The marketing bill for each of the product groups increased. But for each of the groups except poultry and eggs, this bill rose less than the farm-retail marketing bill.

During the last 11 years, the farm-retail marketing bill increased about 70 percent, slightly less than the total marketing bill. The two series no longer

have distinctly divergent trends, as they considerably faster than farm-retail did from 1939 to 1945, when extra costs costs. for food eaten away from home rose

Table 8.--Costs of selected items, and noncorporate profits in the food marketing bill, by type of firm, 1947-49 average and 1960 1/

Item	Processors		Wholesalers <u>2</u> /		Retailers <u>3</u> /		Total	
	Average 1947-49	1960	Average 1947-49	1960	Average 1947-49	1960	Average 1947-49	1960
	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.
Advertising...	329	889	42	90	107	265	478	1,244
Depreciation...	238	739	43	116	126	383	407	1,238
Interest.....	45	116	14	36	14	55	73	207
Taxes paid <u>4</u> /:	240	526	52	101	134	327	426	954
Rent.....	50	179	18	65	163	525	231	769
Repairs, con- tributions, :								
bad debts....	243	434	24	72	71	140	338	646
Profits (pre- tax) <u>5</u> /.....	53	86	26	30	85	130	164	246
Total.....	1,198	2,969	219	510	700	1,825	2,117	5,304

1/ Preliminary.

2/ Merchant wholesalers of groceries and related products.

3/ Includes retail food stores; does not include restaurants and other eating places.

4/ Includes property, social security, unemployment insurance, State income, and franchise taxes, license fees, etc., but does not include Federal income tax.

5/ Profits are for noncorporate firms only; however, the estimates are based on the corporate concept of profits.

Table 9 --Farm-retail marketing bill for domestic farm food products purchased by civilian consumers, farm value, and retail cost, all farm foods and five major commodity groups, United States, annual 1929-1961 ^{1/}

Year	All farm foods ^{2/}			Meat products			Dairy products			Poultry and eggs			Bakery and cereal products			Fruits and vegetables		
	Mar- ket- ing bill	Farm value	Re- tail cost	Mar- ket- ing bill	Farm value	Re- tail cost	Mar- ket- ing bill	Farm value	Re- tail cost	Mar- ket- ing bill	Farm value	Re- tail cost	Mar- ket- ing bill	Farm value	Re- tail cost	Mar- ket- ing bill	Farm value	Re- tail cost
	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.	dol.
1929	9.86	7.22	17.08	2.22	2.23	4.45	1.57	1.76	3.33	.58	1.12	1.70	2.18	.68	2.86	2.68	1.21	3.89
1930	9.82	6.33	16.15	2.31	1.94	4.25	1.56	1.57	3.13	.58	.93	1.51	2.22	.56	2.78	2.55	1.13	3.68
1931	8.40	4.66	13.06	2.21	1.37	3.58	1.41	1.25	2.66	.49	.71	1.20	1.89	.35	2.24	1.98	.86	2.84
1932	7.21	3.40	10.61	1.76	.91	2.67	1.24	.97	2.21	.34	.54	.88	1.65	.26	1.91	1.68	.61	2.29
1933	7.30	3.56	10.93	1.68	.92	2.61	1.21	.96	2.17	.32	.48	.80	1.60	.34	2.00	1.86	.73	2.59
1934	7.92	4.27	12.52	1.90	1.13	3.26	1.24	1.12	2.36	.40	.58	.98	1.81	.47	2.38	2.03	.80	2.83
1935	7.58	5.02	12.94	1.70	1.49	3.39	1.29	1.29	2.58	.34	.75	1.09	1.75	.52	2.41	2.02	.79	2.81
1936	8.51	5.78	14.29	2.00	1.79	3.79	1.39	1.42	2.81	.39	.77	1.16	1.93	.58	2.51	2.22	1.00	3.22
1937	8.20	5.98	14.18	2.05	1.90	3.95	1.41	1.49	2.90	.43	.81	1.24	1.92	.61	2.53	1.81	.95	2.76
1938	8.18	5.20	13.39	1.86	1.71	3.57	1.40	1.32	2.72	.39	.77	1.16	2.01	.41	2.42	1.78	.78	2.56
1939	8.19	5.17	13.37	1.85	1.69	3.54	1.44	1.32	2.76	.38	.72	1.10	1.87	.39	2.26	1.93	.86	2.79
1940	8.5	5.6	14.1	1.9	1.8	3.7	1.5	1.5	3.0	.4	.8	1.2	1.9	.4	2.3	2.0	.9	2.9
1941	9.2	7.1	16.3	1.8	2.5	4.3	1.7	1.7	3.4	.4	1.0	1.4	2.0	.5	2.5	2.2	1.1	3.3
1942	10.5	9.3	19.8	1.7	3.2	4.9	2.0	2.1	4.1	.6	1.4	2.0	2.2	.7	2.9	2.6	1.5	4.1
1943	11.1	11.4	22.3	1.8	3.6	5.2	2.0	2.3	4.3	.7	2.0	2.7	2.4	.9	3.3	2.4	2.1	5.0
1944	11.4	11.6	22.5	1.9	3.7	5.3	2.0	2.5	4.5	.7	1.8	2.5	2.3	.9	3.1	3.1	2.3	5.3
1945	12.5	12.6	24.4	1.7	3.7	5.0	2.2	2.6	4.8	.8	2.3	3.1	2.6	1.0	3.5	4.0	2.5	6.4
1946	15.6	15.7	30.8	2.4	5.2	7.3	2.8	3.5	6.3	1.0	2.4	3.4	3.0	1.3	4.2	4.7	2.6	7.2
1947	18.0	18.7	36.7	3.4	7.3	10.7	3.1	3.8	6.9	1.1	2.7	3.8	3.3	1.5	4.8	5.3	2.6	7.9
1948	19.9	19.3	39.2	3.8	7.5	11.3	3.5	4.1	7.6	1.2	3.0	4.2	3.9	1.5	5.4	5.4	2.4	7.8
1949	20.8	16.9	37.7	4.0	6.5	10.5	3.4	3.5	6.9	1.2	2.8	4.0	4.3	1.2	5.5	5.6	2.3	7.9
1950	20.9	17.6	38.5	4.1	7.2	11.3	3.4	3.6	7.0	1.3	2.6	3.9	4.3	1.3	5.6	5.5	2.2	7.7
1951	22.8	20.0	42.8	4.2	8.0	12.2	3.9	4.1	8.0	1.5	3.2	4.7	4.7	1.4	6.1	6.1	2.5	8.6
1952	24.5	19.8	44.3	4.9	7.7	12.6	4.1	4.3	8.4	1.5	3.1	4.6	4.9	1.3	6.2	6.7	2.7	9.4
1953	25.4	19.1	44.5	5.3	7.2	12.5	4.3	3.9	8.2	1.5	3.3	4.8	5.0	1.4	6.4	6.7	2.5	9.2
1954	26.1	18.4	44.5	5.4	7.2	12.6	4.5	3.8	8.3	1.6	2.7	4.3	5.0	1.4	6.4	6.8	2.5	9.3
1955	27.8	18.3	46.1	6.1	6.7	12.8	4.8	4.0	8.8	1.5	3.0	4.5	5.2	1.3	6.5	7.3	2.5	9.8
1956	29.3	18.7	48.0	6.3	6.8	13.1	5.0	4.2	9.2	1.7	2.9	4.6	5.5	1.3	6.8	7.5	2.7	10.2
1957	30.4	19.5	49.9	6.5	7.6	14.1	5.3	4.3	9.6	1.8	2.8	4.6	5.7	1.3	7.0	7.8	2.7	10.5
1958	31.9	20.8	52.7	6.5	8.6	15.1	5.5	4.3	9.8	1.9	3.1	5.0	6.3	1.3	7.6	8.2	2.7	10.9
1959	33.8	20.0	53.8	7.4	8.1	15.5	5.8	4.3	10.1	1.9	2.7	4.6	6.4	1.2	7.6	8.6	2.9	11.5
1960	34.8	20.7	55.5	7.6	8.2	15.8	5.8	4.5	10.3	1.8	3.0	4.8	6.7	1.2	7.9	9.0	2.9	11.9
1961 ^{4/}	35.6	20.8	56.4	7.7	8.3	16.0	5.9	4.4	10.3	2.1	2.8	4.9	6.8	1.3	8.1	9.1	3.0	12.1
1962																		
1963																		
1964																		

^{1/} Retail-cost estimates represent cost at retail food store prices of all domestic farm foods that were both sold by farmers and bought by civilian consumers in this country. Farm food products sold in the form of meals are included but are valued at what the food would have cost in retail stores. Farm value is adjusted to eliminate imputed value of nonfood byproducts. The farm-retail marketing bill is the difference between the farm value and retail cost except for the years 1933-35 and 1943-46 in which the marketing bill for some groups is adjusted for processor taxes or Government payments to processors. Data for 1952-60 have been revised.

^{2/} Includes vegetable-oil products, sugar, and other food products in addition to the five commodity groups given in this table.

^{3/} The estimated farm values of milk, eggs, fruits, lard and vegetable shortening used in bakery products were deducted from the farm values of other commodity groups and added to the farm value of the bakery and cereal products group.

^{4/} Preliminary estimates.

Data for 1913-28 are published in Farm-Retail Spreads for Food Products, USDA, Misc. Pub. 741, 1957, table 33, p. 49.

Economic Research Service.

Estimates do not include Alaska and Hawaii because of inadequate data.

CONCENTRATION AND OWNERSHIP IN FOOD MANUFACTURING INDUSTRIES^{1/}

Industry Concentration

The distribution of total industry sales or shipments among firms within a given industry is often used as one of the characteristics describing the nature of competition in the industry. High concentration is loosely associated with weak competition. Low concentration is considered a stimulant to strong competition. This association between concentration and competition is not a close one because of a large number of other important forces. These include, among others, barriers to entry of potential competitors, consumer attachment to manufacturers' brands, and the coordination or collusion that may exist among competing firms.

Leading firms in most food manufacturing industries accounted for about the same proportion of industry shipments in 1958 as they did in 1947 (table 10).^{2/} Increasing proportions in some industries were offset by declines in others. Between 1947 and 1958, the proportion of total industry shipments made by the 4 largest firms declined in each of 13 industries, stayed the same in 1, and increased in 11. The 4 largest firms made more than half of total shipments in 8 out of the 25 industries in both 1958 and 1947 (table 10).^{3/}

In 6 industries, the share of the 4 largest firms increased 5 or more percentage

points from 1947 to 1958. The largest gains were made in flour mixes, dehydrated fruits and vegetables, and rice milling. Also in 6 industries, the share of the 4 leading firms declined 5 or more percentage points. Poultry dressing, shortening and cooking oil, and special dairy products industries declined the most.

Between 1954 and 1958, a period of unusually vigorous merger activity, concentration of shipments made by the 4 largest firms declined in each of 19 industries and increased in 10. Declines of 5 points or more were registered in 10 industries, while only 2 showed increases of 5 points or more.

Comparable 1935 ratios were available for 12 industries. In 6 industries, the 4 largest firms increased their share of business between 1935 and 1958, in 1 the share stayed the same, and in 5 it declined. The greatest increase, 15 percentage points, was in the breakfast food industry. The largest decline, 20 points, was in the cooking oil industry.

According to a classification system suggested by J. S. Bain, the cereal break-

^{1/} Prepared by Stephen J. Hiemstra, agricultural economist, Marketing Economics Division, Economic Research Service, USDA.

^{2/} Industry classifications for 1958 in the first section of this report are comparable with those for 1954 and 1947. All are based on the 1945 Standard Industrial Classification Manual. They differ from classifications for the 1958 company data in the next section, which are based on the revised 1957 SIC. For a comparison of industry classifications used in the 1954 and 1958 censuses, see "The Food Marketing Industries - Recent Changes and Prospects," by F. E. Scott and S. J. Hiemstra, in The Marketing and Transportation Situation, February 1962, footnote 1 to table 8, pp. 20-21.

^{3/} The 4 largest firms in each industry were not necessarily the same firms in both 1947 and 1958.

Table 10 --Food manufacturing industries: Number of companies in industry and share of total shipments accounted for by largest companies, 1958, 1954, and 1947

Industry and year <u>1/</u>	Companies	Concentration ratio:			Indexes	
		Percentage <u>2/</u> of value of				
		shipments accounted for by -				
		4	8	20	Primary product	Coverage
		largest companies	largest companies	largest companies	special-ization	<u>4/</u>
					<u>3/</u>	
	Number	Percent	Percent	Percent	Percent	Percent
Meat packing plants <u>5/</u>						
1958	2,646	34	46	57	98	88
1954	2,228	39	51	60	98	87
1947	1,999	41	54	63	<u>6/</u>	<u>6/</u>
Prepared meats <u>5/ 7/</u>						
1958	1,432	17	25	36	97	33
1954	1,254	16	24	35	83	28
Poultry dressing plants						
1958	1,041	12	16	25	95	97
1954	1,189	17	23	33	96	97
1947	330	32	40	58	88	88
Creamery butter						
1958	997	11	18	28	70	80
1954	1,172	16	24	34	74	77
1947	1,482	18	24	32	79	84
Natural cheese						
1958	1,095	35	42	50	<u>6/</u>	<u>6/</u>
1954	1,220	25	30	39	83	74
1947	1,313	27	32	40	84	83
Concentrated milk						
1958	149	50	60	73	<u>6/</u>	69
1954	166	55	68	80	82	68
1947	182	50	63	76	84	77
Ice cream and ices						
1958	1,171	38	48	59	94	71
1954	1,375	36	45	57	93	70
1947	1,273	40	48	57	90	87
Special dairy products						
1958	186	51	62	75	<u>6/</u>	<u>6/</u>
1954	162	66	75	88	91	56
1947	97	62	75	91	91	<u>6/</u>
Fluid milk <u>7/</u>						
1958	5,008	23	29	37	90	95
1954	<u>6/</u>	22	28	<u>6/</u>	<u>6/</u>	<u>6/</u>
Canned fruits and vegetabels <u>8/</u>						
1958	1,347	29	39	55	90	95
1954	1,461	28	39	52	90	94
1947	1,856	27	35	46	91	94
Dehydrated fruits and vegetables						
1958	130	45	66	82	97	93
1954	119	48	69	87	95	97
1947	120	26	71	86	96	90
Pickles and sauces <u>8/</u>						
1958	637	35	48	62	79	73
1954	642	38	48	61	80	75
1947	637	33	43	59	88	69

Continued -

Table 10.--Food manufacturing industries: Number of companies in industry and share of total shipments accounted for by largest companies, 1958, 1954, and 1947 (Continued)

Industry and year ^{1/}	Companies	Concentration ratio:			Indexes	
		Percentage ^{2/} of value of			Primary	
		shipments accounted for by -			product	
		4	8	20	special-	Coverage
		largest	largest	largest	ization	^{4/}
		companies	companies	companies	3/	
	Number	Percent	Percent	Percent	Percent	Percent
Frozen fruits and vegetables ^{7/ 8/}						
1958	246	31	43	67	79	86
1954	215	39	55	71	83	84
Flour and meal						
1958	703	38	51	68	93	85
1954	692	40	52	68	94	84
1947	1,084	29	41	57	92	92
Cereal breakfast foods						
1958	34	93	95	99	80	81
1954	37	88	95	99	77	80
1947	55	79	91	98	68	87
Rice milling						
1958	61	43	64	84	100	100
1954	65	41	60	81	99	100
1947	75	33	48	72	100	100
Flour mixes						
1958	109	75	86	94	63	2/38
1954	123	73	82	92	71	2/45
1947	115	41	60	78	81	2/17
Bread and related products						
1958	5,305	22	33	42	98	99
1954	5,470	20	31	40	98	99
1947	5,985	16	26	36	93	99
Biscuit and crackers						
1958	253	65	72	82	96	94
1954	262	71	77	85	97	93
1947	249	72	78	86	96	93
Raw cane sugar						
1958	45	38	52	78	97	100
1954	43	40	52	78	96	97
1947	77	36	45	66	97	100
Cane-sugar refining						
1958	16	69	83	100	100	100
1954	16	67	86	100	100	100
1947	17	70	83	100	100	100
Beet sugar						
1958	15	64	94	100	90	100
1954	15	66	96	100	99	100
1947	17	68	94	100	100	100
Shortening and cooking oil						
1958	66	49	75	97	86	88
1954	67	55	80	99	85	89
1947	68	59	81	99	82	96

Continued -

Table 10.--Food manufacturing industries: Number of companies in industry and share of total shipments accounted for by largest companies, 1958, 1954, and 1947 (Continued)

Industry and year <u>1</u> /	Companies	Concentration ratio:			Indexes	
		Percentage <u>2</u> / of value of			Indexes	
		shipments accounted for by -			Indexes	
		4	8	20	Primary product specialization <u>3</u> /	Coverage <u>4</u> /
	Number	Percent	Percent	Percent	Percent	Percent
Margarine						
1958	22	62	86	<u>6</u> /	84	61
1954	20	48	78	100	90	62
1947	17	64	90	100	81	73
Corn wet milling						
1958	53	73	92	99	91	96
1954	54	75	93	99	91	96
1947	47	77	95	99	88	96
Macaroni and spaghetti						
1958	205	25	41	64	97	98
1954	226	26	37	58	98	95
1947	219	23	35	56	98	99
Cottonseed oil mills						
1958	125	42	54	71	92	92
1954	145	47	57	72	96	93
1947	177	43	55	68	90	99
Soybean oil mills						
1958	66	40	63	86	87	94
1954	55	41	64	89	88	96
1947	105	44	63	81	96	80
Food preparations not elsewhere classified <u>7</u> /						
1958	2,596	29	36	49	94	94
1954	2,357	33	42	55	94	86

1/ Industry categories are based on the 1945 version of the Standard Industrial Classification so internal comparability is maintained, but differences exist from 1958 Census of Manufacture.

2/ Percentages are sums of value of shipments of 4 largest (or 8 or 20) companies divided by the total value of shipments of the industry.

3/ Primary product specialization index is calculated by dividing the total value of the products primary to the industry by that industry's total value of shipments.

4/ Coverage index is calculated by dividing the value of the shipments an industry makes of its primary products by the total value of all shipments of those products, including shipments made by other industries.

5/ Concentration ratios are based on value added by manufacture, because the value of shipments contains a substantial and unmeasurable amount of duplication arising from interplant shipments.

6/ Not available.

7/ Data not available for 1947.

8/ Ratios computed on value of production.

9/ Products of the flour mix industry are also primary products of the flour and meal industry.

Compiled from Concentration Ratios in American Industry, Report prepared by the Bureau of Census for the Subcommittee on Antitrust and Monopoly to the Committee on the Judiciary, United States Senate, (87th Cong., 2d sess., 1957) table 2.

fast food industry has "top level" concentration. ^{4/} Six other industries were either in the "highly concentrated" or "high moderate" classifications in 1958. These were the flour mixes, biscuits and crackers, corn wet milling, cane sugar refining, beet sugar, and margarine industries. In 1954, 8 food industries compared with 9 in 1947 were in these classifications.

Use of concentration ratios (the proportion of total industry shipments made by a specified number of the largest firms), based on Census of Manufacture industry classification, has certain limitations in economic studies. Close substitution exists among some products of different industries such as cane and beet sugar, and flour mixes and flour and meal. Such products belong in a single market. In such cases, industry ratios usually overestimate market concentration. Conversely, some census industries produce products that are quite unrelated in use and not reasonably part of the same market. Then, underestimation of market concentration is generally the result. Concentration ratios in table 10 are based on totals for the entire United States. When markets are regional or local, such as in bread and related products, the stated ratios typically underestimate concentration in a given market. ^{5/}

Total shipments of a plant are assigned to the industry to which the primary product of the plant belongs, even if secondary products economically belong in other industries. The primary product specialization index measures the ratio of primary products to the total shipments of an industry. Products that belong in a given industry may be produced by plants classified in other industries. The coverage index measures the shipments an industry makes of its primary product as a ratio of the total value of shipments of that product, including those made by other industries. Primary product specialization and coverage indexes are not needed when concentration ratios are computed by product, rather than industry classifications.

Product ratios show the proportion of total shipments of a given product made by a specified number of largest firms. Product ratios differ markedly from industry ratios only when the coverage or primary product specialization ratios are low. ^{6/}

The number of companies declined in 17 of 25 food manufacturing industries between 1947 and 1958 (table 10). Declines of one-third or more took place in 5 industries--creamery butter, flour and meal, cereal breakfast foods, raw cane

^{4/} For "top level" concentration, the 4 largest firms must have 75 percent or more of total industry shipments and the 8 largest must have 90 percent or more. In "highly concentrated" industries, the 4 largest firms have 65-75 percent of industry shipments and the 8 largest 85 percent or more. In those with "high moderate" concentration, the 4 largest firms account for 50-65 percent of the total value of shipments and the 8 largest for 70 percent or more. See J. S. Bain, Industrial Organization (John Wiley & Sons, Inc., 1959), pp. 124-130.

^{5/} The 4 largest firms in the bread and related products industry had 20 percent of the national market in 1954. But in 23 States, over 50 percent of the market was taken by the 4 largest firms. Administered Prices: Bread, report of the Senate Subcommittee on Antitrust and Monopoly, (86th Congress, 2nd Session, 1960), Senate Report 1923, pp. 120-125.

^{6/} In 1954, a coverage of 28 percent and specialization of 83 percent in prepared meats gave a product ratio of 32 and an industry ratio of 16 for the 4 largest firms. A coverage of 45 percent and specialization of 71 percent in flour mixes gave a product ratio of 54 and an industry ratio of 73 for the 4 largest firms. Special dairy products had a product ratio of 49 and an industry ratio of 66. Product ratios for 1958 are based on the revised 1957 Standard Industrial Classification, so are not comparable with industry ratios for that year.

sugar, and soybean oil mills. One industry had no change during the period, while in 7 the number of companies in-

creased. Large increases took place in the meat packing, prepared meats, and special dairy products industries.

Type of Organization

The 28 industry groups that manufacture domestic farm-produced food products had a total of 26,545 establishments in 1958. ^{7/} This was down 4 percent from the number in 1954 (table 11). The number of establishments operated by multiunit firms increased 21 percent from 1954 to 1958, while those operated as single-unit firms declined 10 percent. As a result, the proportion of the total operated by multiunit firms increased from 17 to 22 percent.

In each of 7 industries, multiunit firms operated more than one-half of the establishments in 1958. Between 1954 and 1958, the proportion of establishments operated by multiunit firms increased in all but 3 of the 27 industries for which data were available in both years. The shortening and cooking oils (including margarine) industry had the greatest increase--going from 55 to 66 percent of the total. Other industries that had increases exceeding 5 percentage points were fluid milk, ice cream and frozen desserts, frozen fruits and vegetables, cereal preparations, wet corn milling, bread and related products, and cane sugar refining. ^{8/}

The 28 industries contained 64 percent of the total establishments in the food and kindred products industry group in 1958. This larger group includes industries whose primary products are beverages, candy and confectionery products, seafoods, ice, prepared animal feeds, flavorings, and leavening compounds. From 1954 to 1958, the number of establishments in the food and kindred products groups declined by 2 percent. But from 1947 to 1958, the number increased by 4 percent. The proportion of establishments in food and kindred products operated by multiunit firms went down from 24 percent of the total in 1947 to 17 percent in 1954 and then climbed to 22 percent in 1958.

Establishments operated by multiunit firms were larger than average in the food and kindred products industry. Establishments operated by multiunit firms accounted for 69 percent of the total value added by manufacturing in the industry in 1958. This percentage was up from 61 in 1947 and 65 in 1954.

^{7/} Based on the revised 1957 Standard Industrial Classification used in the 1958 Census of Manufacturers.

^{8/} The shift in ownership of the frozen fruit and vegetable industry may have been caused by the reclassification of establishment among industries between the 1954 and 1958 Censuses. A net gain of 123 establishments, 29 percent of the 1958 total, was caused by the reclassification. Other industries with large additions due to reclassification include poultry dressing plants, 102 establishments (8 percent); condensed and evaporated milk, 17 (5 percent); biscuits and crackers, 35 (10 percent); soybean oil mills, 19 (16 percent); and shortening and cooking oils, 14 (13 percent). Those with relatively large losses include natural cheese, 87 establishments (7 percent); special dairy products, 96 (90 percent); and pickles and sauces, 86 (14 percent).

Table 11.--Food manufacturing industries: Number of establishments classified by type of ownership and organization, 1954 and 1958

Industry	Number of establishments									
	Total ^{1/}		Operated by:				Organized as:			
			Multiunit firms		Single unit firms		Corporations		Noncorporate firms	
	1958	1954	1958	1954	1958	1954	1958	1954	1958	1954
Meat products										
Meat packing plants	2,801	2,367	338	243	2,463	2,124	1,184	1,099	1,617	1,268
Prepared meats	1,494	1,316	169	133	1,325	1,183	802	674	692	642
Poultry dressing plants	1,233	1,309	235	189	998	1,120	538	464	695	845
Dairy products										
Fluid milk	5,816	6,689	1,060	711	4,756	5,978	2,508	2,367	3,308	4,322
Creamery butter	1,058	1,262	146	172	912	1,090	235	526	823	736
Natural cheese	1,203	1,419	246	263	957	1,156	375	467	828	952
Condensed and evaporated milk	313	359	222	244	91	115	248	289	65	70
Ice cream and frozen desserts	1,382	1,587	395	343	987	1,244	800	883	582	704
Special dairy products	107	187	30	47	77	140	73	144	34	43
Canning, preserving and freezing										
Canned fruits and vegetables	1,607	1,758	476	464	1,131	1,294	1,092	1,196	515	562
Dehydrated fruits and vegetables	161	148	53	49	108	99	84	73	77	75
Pickles and sauces	619	717	122	140	497	577	362	411	257	306
Frozen fruits and vegetables	426	266	152	75	274	191	345	211	81	55
Canned specialties ^{2/}	107	^{2/}	44	^{2/}	63	^{2/}	88	^{2/}	19	^{2/}
Grain mill products										
Flour and meal	814	803	194	175	620	628	385	436	429	367
Cereal preparations	43	46	24	22	19	24	37	40	6	6
Rice milling	72	80	23	25	49	55	54	57	18	23
Blended and prepared flour	117	131	25	25	92	106	81	88	36	43
Wet corn milling	59	58	22	16	37	42	46	46	13	12
Bakery products										
Bread and related products	5,985	6,103	1,246	889	4,739	5,214	2,325	2,288	3,660	3,815
Biscuits and crackers	334	311	100	84	234	227	234	196	100	115
Sugar										
Raw cane sugar	50	49	15	13	35	36	35	39	15	10
Cane sugar refining	28	23	24	18	4	5	28	22	---	1
Beet sugar	66	65	62	59	4	6	66	64	---	1
Fats and oils										
Cottonseed oil mills	214	286	124	177	90	109	189	258	25	28
Soybean oil mills	117	88	68	58	49	30	94	77	23	11
Shortening and cooking oils ^{3/}	105	135	69	73	36	61	97	114	8	21
Miscellaneous industries										
Macaroni and spaghetti	214	233	27	27	187	206	107	123	107	110
Total 28 industries	26,545	30,607	5,711	5,366	20,834	25,241	12,512	14,115	14,033	16,492
Food and kindred products	41,619	42,374	8,962	7,124	32,657	35,250	21,503	20,929	20,116	21,445

^{1/} A change in classification of establishments among industries between 1954 and 1958 resulted in a net gain of 123 establishments in the frozen fruits and vegetables industry, 102 in poultry dressing, 17 in condensed and evaporated milk, 35 in biscuits and crackers, 19 soybean oil mills and 14 establishments in shortening and cooking oils industry. The change resulted in net declines of 87 establishments in the natural cheese industry, 96 in special dairy products and 86 in pickles and sauces.

^{2/} Canned specialties was a new industry classification in the 1958 Census. It includes plants manufacturing baby foods, soups (except sea food soups), "native foods," health foods, and other canned specialties.

^{3/} Includes data for margarine.

Compiled from Census of Manufactures, 1958 and 1954.

Ownership

Not much change took place in the type of ownership of food manufacturing establishments from 1947 to 1958. Corporate firms owned nearly half of the establishments in the 28 farm-food manufacturing industries in 1958, up 1 percentage point from 1954 (table 11). Two industries had only corporately owned establishments in 1958 -- cane sugar refining and beet sugar. In each of 17 other industries, corporations owned more than half of the establishments. Between 1954 and 1958, the proportion of corporately owned establishments increased in 14 industries, decreased in 12, and stayed the same in 1. Increases of 5 percentage points or more were made in 4 industries: poultry dressing, fluid milk, biscuits and crackers, and shortening and cooking oils. Decreases of 5 points or more were made in 5: creamery butter, special dairy products, flour and meal, raw cane sugar, and soybean oil mills.

The food and kindred products industry group had a few more establishments owned by corporate than noncorporate firms in 1958. The proportion owned by corporations rose from 49 percent in 1947 to 52 percent in 1958. Establishments owned by corporations were of larger average size than those noncorporately owned. Those owned by corporations made up 90 percent of the total value added by manufacturing in 1958, up from 89 percent in 1947. Individual proprietors owned most of the noncorporately owned establishments. Individuals owned 28 percent of all establishments in the food and kindred products group in 1958, but these establishments produced only 3 percent of the total value added by manufacturing. Partnerships owned another 16 percent of the establishments, with 4 percent of the value added. The remaining 4 percent of establishments with 3 percent of the value added were owned by cooperatives and other types of firms.



Growth Through Agricultural Progress

MARKETING FOOD DOMESTICALLY IN JAMAICA^{1/}

The attention of agricultural economists in the United States is turning increasingly to the agricultural problems of the underdeveloped areas of the world. Agriculture is the major industry presently in many of these countries, and its improvement and expansion will be one of the major avenues for increased income, exchange earnings, and probably employment in the years ahead. Although each developing country has certain unique components of its resources and setting, the island of Jamaica is faced with many of the same conditions and problems as are found in other islands of the Caribbean and in other areas of the world. ^{2/} Furthermore, Jamaica and the United States may be expected to develop increasing trade and cultural ties because of geographic proximity and because of the complementary nature of the agriculture of the two. Likewise, the Alliance for Progress may lead to further cooperative efforts by these two countries. Also, the economic ties between Jamaica and Great Britain -- of which Jamaica has been a colony for over two centuries -- may be expected to change with the independence of Jamaica within the British Commonwealth on August 6 and the prospective affiliation of the United Kingdom with the European Economic Community. This article deals mainly with agricultural marketing problems in the domestic market in Jamaica and the possibilities of making agriculture a more important element in the future growth of the country through improvements in marketing. Some of the methods discussed in this article already have been employed elsewhere and may have application to conditions in other developing areas that are in transition from subsistence to commercial agriculture.

General Economy

The Jamaican economy has made remarkable progress since World War II, and during the 1950's real income per capita increased at a rate of about 6 percent (compounded) annually. Despite this growth, the level of per capita income is now less than 20 percent as high as in the United States, and the unemployed constitute about 15 percent of the labor force. Thus, many persons have not shared in the increased economic activity, although governmental

services pertaining to such matters as education and medical attention have been expanded significantly. Continued economic growth is the major need and goal of the country. Figure 1 shows the island of Jamaica.

A persistent problem with which the country is faced is the steady rise in population. Despite migration to England and

^{1/} Prepared by Winn F. Finner, who was FAO Marketing Advisor to the Jamaican Government in 1961, and Fred L. Faber, who studied poultry marketing in Puerto Rico. Both are agricultural economists of the Marketing Economics Division, Economic Research Service, USDA.

^{2/} The frequent similarity among underdeveloped countries with respect to agricultural marketing conditions has been referred to in several recent studies, e.g., Abbott, J. C., "The Role of Marketing in the Development of Backward Agricultural Economies," Journal of Farm Economics, Vol. 44, May 1962, pp. 349-362.



Figure 1

-- to a lesser extent -- other countries, the population in 1960 of 1.6 million was about a fifth larger than in 1950.

Increasing demand for food generated mainly by a growing population and rising incomes has maintained a steady upward pressure on food prices, which rose by over 60 percent between 1950 and 1961. Such increases are not unusual in economies undergoing significant expansion, but they can be deterrents to future growth both because of the increases in costs they represent and because of their severe impact on people with fairly fixed money incomes and on the unemployed.

Despite population increases, a high rate of unemployment, underutilized land on many farms, and a growing domestic demand for food, agricultural production has decreased. Exports of farm products have increased slightly, but imports of food for domestic use rose from about 20 percent of the total supply in 1950 to roughly 30

percent in 1960. Total agricultural output for both domestic use and export was 5 percent lower in 1959 than 5 years earlier.

The extent of future expansion of the Jamaican economy will depend to an important degree on changes in agriculture. Employment in agriculture is larger than in any other industry, and agricultural exports account for over 40 percent of all exports. Agriculture, directly and indirectly, probably is the basis for over 40 percent of gross national product. Moreover, as suggested above, much of the resource base necessary for agricultural expansion is now available, although remedial measures will be needed if resources are to be employed effectively in agriculture.

To be sure, the quadrupling of tourism and the rise of Jamaica as the world's leading producer of bauxite during the past decade both are important developments,

as is the establishment of several new industries such as garment making. However, the attraction of investment capital has been difficult and painstaking, and the creation of substantially larger employment opportunities in nonagricultural occupations for the unemployed will be beset with major obstacles. Problems will be further aggravated if emigration is seriously curtailed by the recent legislation enacted by the British Government and by the continuation of severe entry restrictions by other countries to which Jamaicans might migrate. Such restrictions alone could lead to an increase of about one-third in the labor force over the next decade.

Thus, it is important that agriculture be improved and expanded. It is likewise important that this improvement be accomplished without: (1) Undue demands on investment capital; (2) unnecessary strains on foreign exchange; (3) a heavy demand on the funds of the Government of a poor country, which is faced with major needs for more schools, roads, port facilities, research activities, nutritional programs, and numerous other public services; and (4) technological changes in agriculture that will substantially add to unemployment for protracted periods. Condition four above might be modified, of course, were methods derived to share gains from technology among those displaced by it.

Agricultural Production

Jamaica is a country of small farms (table 12). There are almost 200,000 on 1.8 million acres. Seventy percent are of less than 5 acres, and over 95 percent do not exceed 25 acres. These small farms, in the aggregate, are the major source of domestically produced food crops for local consumption and produce three-fourths or more of the total output of most foods. Likewise, they are the major source of supply for most kinds of livestock except beef cattle.

Several characteristics of these small farms (25 acres or less) and the people who operate them can be identified.

In addition to being small, many farms are fragmented. The 195,000 small farms in 1958 consisted of over 350,000 parcels of land. Much of this land is extremely hilly and eroded from cultivation during the last 125 years or more. There is a substantial seasonal variation in rainfall over the Island, and most farms experience a shortage of water for crop production for periods of 2 to 8 months each year. Supplementing rain by irrigation is seldom practiced and would be extremely difficult on much of this land. These conditions lead to a seasonal pattern of crop production, much as in colder climates, and to the need for much hand labor in farming operations. Only simple mechanical equipment is used

because of topographical conditions. About three-fourths of the small farms have neither mechanical nor animal power.

Less than 30 percent of the cultivated land is planted to a single crop at one time, and it is not unusual to find 10 to 15 different crops growing intermixed on small plots. This pattern aids in reducing erosion as several canopies of leaf cover -- ranging from breadfruit and mango trees to low-growing annuals -- are created. However, this also means that row culture is little practiced, which in turn creates distinct difficulties in using fertilizer, insecticides, and adopting other cultural improvements.

Production also is characterized by a wide variety of crop and livestock enterprises. Practically all enterprises conducted on farms in the United States (except for certain legumes and grains) are to be found in Jamaica, plus 100 to 150 products not grown commercially in the United States. Thus, agriculture yields small quantities of a wide variety of products, many of which are consumed on the farms where produced. Jamaica aptly is called "the land of samples."

The farmers who operate these lands generally are hard working, but they have

Table 12.--Number of farms, acreage in farms, and cultivated acreage, by size groups, Jamaica, 1958

Farm size groups	Farms	Acreage	Cultivated acreage
<u>Acres</u>	<u>Number</u>	<u>Acres</u>	<u>Acres</u>
Less than 1	42,900	22,000	15,900
1 to 5	98,324	248,681	158,760
5 to 25	53,300	546,300	223,800
25 to 100	4,012	176,872	35,973
100 to 500	639	130,994	24,591
500 and over	314	697,796	153,642
Total <u>1</u> /	199,500	1,822,800	612,700

1/ Rounded.

little of the technical information or supplies needed for more efficient production. Even the existence of these would not overcome the difficulty posed by the small size of farms. Most farmers have had no technical training in agriculture, and it would not be easy with limited means to design an extension service to reach them effectively. This is particularly true because many of these farms are not on roads; they have no electricity, and battery-operated radios are few; there is no rural delivery of mail; and some of the farmers cannot read. Furthermore, this type of isolation from much of the world beyond the immediate community seems to produce a marked skepticism toward new methods and practices.

As a result of these conditions, farm income and assets are small. Many farmers have gross farm incomes of \$200 or less annually. Perhaps one-half of the operators have income from off-farm work, though this may be only for a few days per year at a daily wage of \$1.00 to \$1.25, unless they are skilled or obtain employment on a sugar estate. Likewise, current assets probably average less than \$50 per small farm.

With the abolition of slavery in 1838, acquisition of a small plot of land freehold was a lofty ambition for the freed slaves and one which many of them achieved. Now many rural Jamaicans consider practically any off-farm employment -- either in Jamaica or in countries to which Jamaicans migrate -- superior to agriculture. Small-farm operators often report considerable difficulty in hiring labor. Agricultural employment is regarded as inferior because of low income potential and probably a low social status. Many individuals who could have become superior farmers have, in fact, moved to nonagricultural employment. Thus, there is not a well-developed middle class in agriculture which could provide the leadership for many of the needed improvements. Many production problems exist to their present degree, because there are almost 200,000 small farms rather than, say, 20,000 larger farms. 3/

In summary, the present supply of locally produced foods for domestic use comes from a large number of small farms, on which total production is tending downward despite average farm prices for many products being 25 to 50 percent

3/ A good recent treatment of peasant agriculture in a developing country is contained in: Edwards, David, An Economic Study of Small Farming in Jamaica, Institute of Social and Economic Research, University College of the West Indies, 1961.

higher than those received by U. S. farmers in recent years. Various production difficulties have resulted in yields that often are only about a fifth as large as in commercial production areas in the United States. The great diversity, seasonal variation, and small scale of production per farm, together with the difficulty of reach-

ing many farms, have accentuated the problems of marketing. These problems include assembling products, maintaining quality, establishing grade standards, developing and disseminating satisfactory market intelligence, and avoiding unusually wide swings in supply and, thus, in prices.

Present Marketing Conditions

Annual food consumption in Jamaica during 1958, the latest year for which data are available, approximated 1.8 billion pounds. Of this, 1.4 billion pounds were produced in Jamaica and 0.4 billion pounds were imported. Part of domestic production was consumed on farms where produced. Probably 0.5 billion pounds of goods were so used, leaving about 0.9 billion pounds that were produced and sold locally. Thus, the Jamaican internal marketing system handles about 1.3 billion pounds of goods annually. In addition, roughly 1.2 billion pounds of domestically produced commodities are exported, but this volume is not considered in the following discussion.

Diversity of Marketing Organizations

Several types of organizations are involved in marketing domestic food supplies, although most of these play a minor role.

The Jamaican Government conducts commercial trading in a wide variety of food crops. During the war and immediately thereafter, these operations were sizable, partly because of purchases in the conduct of a price support program. Since then, the volume handled has declined -- as a percentage of total food supply -- and in 1960 accounted for less than 1 percent of the total. Government institutions are required to buy some of their foods from this trading agency, and sales also are made to food stores and other local buyers. The operations of this agency have been hampered, because it must comply with various governmental procedures concerning employment and financial controls.

Farm cooperatives were first established more than 100 years ago in Jamaica. However, as is also true in a number of other Caribbean Islands, they are not now important in the marketing of products for domestic consumption. Twenty-six cooperatives reported sales of food products locally in 1960, but their aggregate sales were less than 1 percent of the total food supply. Slightly over one-fifth -- 42,000 -- of all farmers in Jamaica sold some of their products through cooperatives during that year, but sales were less than \$8.00 per member. No doubt several basic changes will be needed before cooperatives can occupy a major position in the local food economy. Some producer groups, not organized as cooperatives, have become important in the sale of a few products such as eggs and broilers.

The Jamaica Agricultural Society -- the largest farm organization -- also has conducted marketing operations in the local market, but these have been a minor phase of the Society's activities, which are oriented largely to informational and extension work. Total sales are of roughly the same magnitude as those handled by cooperatives.

Retail food stores seem to be handling a slightly increasing proportion of total domestic food sales and operators of some of these shops procure supplies directly from farmers. The substantial growth in number of supermarkets during the past decade has centered a larger volume of business in the hands of fewer merchants than was true earlier. And a few of the supermarket organizations have begun to make more systematic

arrangements with local farmers and other suppliers. Nevertheless, the bulk of the merchandise sold by retail food shops is imported.

Wholesalers and other dealers also function in the economy, accounting for a major portion of the foods imported. They procure fairly small quantities of locally produced foods from farmers, or the groups mentioned above, for resale to retail stores.

The predominant handler of domestically produced and consumed foods is a type of buyer known as a higgler, of whom there are several thousand. Higgler handle little poultry and meat, but they account for a major share of the fruits, vegetables, ground provisions (yam and other edible tubers), beans, peas, and other foods.

Higglers are of two principal types. One type both assembles and sells products, and the other specializes in retailing. The first type -- usually the wife of a farmer or other person living in the country -- assembles her products and those of her neighbors. She transports these products (not infrequently a mile or more) usually by head carry or donkey to a main road over which a truck passes. Then she accompanies the produce on the truck to one of the markets on the Island. Here she may sell directly to housewives, to the second type of higgler, or to other buyers.

In Jamaica, there are 99 parochial markets. These are centers, established by the Government, where buyers and sellers can meet, and many higgler go to such markets to sell supplies. These markets usually have few facilities other than a roof, sometimes a cement floor, and perhaps a light or two. For the

payment of a fee -- usually 35 cents or less -- the higgler rents a few square feet of floor space, where she displays products until they are sold.

Other higgler make sales from house-to-house, on street corners, or in other locations apart from the established parochial markets.

Outside observers no doubt can detect numerous practices of higgler which are inconsistent with generally recommended marketing methods. Products are moved in small lots -- a higgler may spend 3 to 4 days per week in assembling and selling perhaps 100 pounds of produce. In order to minimize return hauling costs and for ease in handling, higgler frequently use bags rather than rigid containers, so damage to products in transit is likely to be greater than when rigid containers are used. Only rudimentary attention is given to grades, and the level of sanitation varies widely. Farmers may find higgler an unsatisfactory outlet, particularly in seasons of large production, because they may buy only part of the supply that is ready for market. Also, higgler generally prefer to handle products with a high value per pound.

Despite these conditions, however, the higgler system will not be easy to replace and may be expected to function with vitality for another generation or more. Higgler have become exceedingly adept at cultivating the goodwill of both suppliers and customers. They have amassed a considerable knowledge of what can and cannot be handled profitably. Higgler have provided a level of competition which has thwarted attempts to introduce "more modern" methods. 4/

4/ A recent detailed study of the operations of 5 higgler buying from farmers and retailing in the largest city in Jamaica showed the following weekly averages per higgler for a year: Sales, \$19.28; cost of transportation and market fees, \$1.72; payments to farmers for produce, \$13.62; income to higgler for several days labor plus capital use, \$3.94. Thus, farmers received slightly over 70 percent of the retail sales value of their products. (From Katzin, Margaret F., Higgler of Jamaica, Unpublished Ph.D. thesis, Northwestern University.)

They are not equipped, however, to:

- (1) Handle the large volumes such as required by supermarkets;
- (2) provide a dependable source of the quality of product demanded by hotels and similar buyers, including the export market; and
- (3) handle seasonal surpluses through storage, processing, or through coordination of production plans with prospective markets.

Facilities

Facilities are available for several marketing operations, including local transportation (where roads are available), cool and cold storage, canning, and pasteurizing. There are numerous instances, however, where costs could be reduced by using improved equipment such as a machine -- rather than hand labor -- for peeling of citrus for canning. Perhaps of greater importance than the type of technology used is the need for improving the management of present marketing resources and increasing the level of skills for many marketing jobs such as meat cutting.

Many observers contend that facilities are seriously inadequate, either because of the lack of sanitary safeguards or because they are lacking for certain operations. Livestock slaughtering facilities may be cited as an example of the first. Much slaughtering is done with the simplest of equipment and with no refrigeration for the handling of meat. Particularly in rural areas, the measures taken to protect wholesomeness generally are substantially lower than, for example, in the United States. Major improvements will be needed if Jamaican meats are to compete effectively with imported supplies in the growing "quality market." However, the bulk of the meat is sold to middle- and low-income consumers, and there is little evidence of a demand from this group for higher standards of sanitation or of a willingness to pay the higher prices associated with such standards.

Likewise, it is true that equipment may not be available for a number of operations such as the washing, sizing, and waxing

of cucumbers for export. Yet, the high irregularity both from season to season and year to year in the demand for such services raises pronounced difficulties for firms attempting to supply them.

Retailing facilities are now undergoing significant improvement through growth in the number of supermarkets -- both chains and independents. Nevertheless, the bulk of the country's retail food shops are still very small and charge prices which are relatively high.

One of the most serious service inadequacies is that of ocean-going shipping, except for a few of the well-established export crops.

Marketing Information

Prices and other marketing conditions obviously are of major importance in a country where agriculture is the major industry. Much market intelligence is informally disseminated through the Island by truckers, higglers, and others. However, for domestic food crops no objective market information is systematically available. Furthermore, the lack of grading systems and the wide variety of weights and measures used are problems that will need to be overcome, if a satisfactory market news system is to be established. Likewise, better methods will need to be developed for disseminating such information. Otherwise, the considerable and irregular price differentials among various markets in the country are likely to continue, and agricultural decisions generally will continue to be based on fragmentary knowledge.

Pricing Practices

In the sale of domestic food crops, producers usually do not receive price premiums for superior quality. Cooperatives and other farm groups generally sell products in lots, which include all receipts from participating farmers, and the same price is paid to all farmers. Much the same conditions exist in sales by individual farmers. Some buyers, of course, attempt to procure

all supplies from particular farmers known to have products of above-average quality and uniformity. And higgler may be selective in choosing the produce they will buy from a particular farmer. However, the premiums associated with such purchases may be nonexistent or vary considerably. Approximately the same situation occurs in livestock sales, although price differentials associated with age and type of animal are fairly common.

There are no established grades for fresh products sold domestically, and this condition will need to be changed before a satisfactory system of selling by grade can be established. Much greater progress has been made in export sales, where quality differentials customarily are paid by foreign buyers.

A second pricing condition which dampens producer incentives is the slowness with which payment is made by some buyers. Delays of 6 to 8 weeks or more between the date of delivery and final payment are not unusual.

Thinness of Market for Some Products

Ten to 15 products constitute the major foods in the diet of most Jamaicans. This diet is mainly cereals, yam and other tubers, banana, sugar, and fish. Most other products are consumed in much smaller volume. The total supply of many fresh vegetables, for example, sold in a particular season could be grown on less than 20 acres producing commercial-yields. Sales of vegetables harvested on a few more or less acres can have a pronounced impact on prices, as can fluctuations in yields because of weather variables. The same general conditions characterize the present market for many other products, i.e., small changes in quantities offered can mean sharply higher or lower prices. It is true that use can be made of short-term storage to lessen the adverse impact on price of an unusually large supply. However, the low level of consumption throughout much of the year and competition from other products during pe-

riods when there would be out-of-storage movements both suggest only a moderate role for storage programs for many commodities. Cold storage charges of slightly over 1 cent per pound per month operate to reinforce this conclusion. Some means of more systematically relating planting to anticipated sales in the domestic market would appear to be a more fruitful way of dealing with this problem.

Marketing Costs

Marketing costs tend to be high, although there is much variation among products and processes. In some cases, rather substantial reorganization will be needed to achieve any significant cost reduction. It is difficult, for example, to see how higgler could lower the cash costs they incur in assembling products and transporting them to consumption centers. Higgler are limited in the quantity they can handle physically and usually have no alternative to shipping by commercial truck. It would be possible, nevertheless, to achieve lower transportation (other than assembly) costs by the movement of full truck loads in single lots from country points rather than to have numerous individual lots of 100-200 pounds, each in separate packaging, transported as is now done. Likewise, retailing margins may be reduced as the numerous small shops are partially replaced by much larger stores.

In the meantime, prospects are not favorable for reductions in total costs incurred by higgler in assembling and retailing products. Likewise, cost reduction in livestock slaughter seems unlikely, although further centralizing of slaughtering might enable greater returns from byproducts. These returns might offset the likely higher plant costs of operating under higher standards.

On the other hand, it should be possible to lower marketing margins (and perhaps costs) in the sale of fluid milk, particularly if the volume of sales is expanded. The margins between prices received by farmers -- 11 to 12 cents

per quart -- and paid by consumers -- 23 to 26 cents per quart -- are fairly similar to those prevailing in eastern United States cities. However, fewer services are provided in Jamaica. Little milk is homogenized or pasteurized, second-hand rum bottles frequently are used as containers, and usually no refrigeration is provided. Most milk is produced within a few miles of consumption, so that transportation costs are low relative to those in major United States markets.

Margins (and to some extent costs) in the handling of imported foods appear high, and the Jamaican Government controls retail prices of a few imported foods. Typically, only a single agency imports a particular brand of food.

Marketing costs incurred by governmental organizations also are susceptible

to reduction partly through lowered administrative and fixed costs. These organizations, like most firms, suffer from a volume which is too small. Larger volumes would permit lower unit costs to such organizations, as well as to firms engaged in processing and storing. It is not uncommon for importers to store U. S.-purchased foods in the United States, rather than in Jamaica until needed, because of the lower storage rates prevailing in this country.

Prices of most inputs such as cans, other packaging, transport equipment, and motor fuel are higher in Jamaica than in the United States, but labor rates are substantially lower. Much of the labor employed by marketing firms is paid \$1.50 to \$2.00 per day.

Direction of Marketing Improvements

Improvements in marketing alone cannot rectify agricultural shortcomings in Jamaica or in other developing areas. If a fully efficient agriculture is to be developed, shortages of water, electricity, and other resources must be remedied. Technical knowledge must be improved. Defects in the land tenure system, such as those enabling increases in income to be channeled largely to landowners rather than operators, must be corrected. Also, deficient credit and tax systems must be revised. Programs for improving and broadening education, of course, will be of major importance to the entire economy. Nevertheless, marketing improvements can play a major role in producing benefits for consumers and incentives for producers. The absence of marketing improvements probably will largely nullify other measures taken to strengthen agriculture. Jamaica obviously requires a unified program to improve conditions in production and marketing.

The principal improvements required in marketing to provide broader pro-

ducer incentives for small farmers appear to be:

1. Better appraisal of market prospects for agricultural products.

A major present difficulty is that too many products are produced in too small quantity. This situation leads to several difficulties.

First, extremely diverse research programs need to be conducted concerning appropriate varieties and cultural techniques for scores of farm enterprises. Even in a country as small as Jamaica, findings suitable for one area, may not be appropriate for other areas.

Second, an extension service needs to be trained and staffed to relay the resulting wide variety of technical information to farmers.

Third, widely diversified marketing facilities need to be maintained for inspection, grading, processing, and other

activities, many of which will be conducted for only short periods during each year.

Fourth, the problem of developing satisfactory market appraisals and intelligence are made much more difficult by the diversity of enterprises.

Fifth, farm income is lower than if production were centered in those few enterprises having the highest comparative advantage.

These problems could be materially reduced if production were centered on a smaller number of products. Thus, analyses of prospective price levels for different products at various levels of supply and in different markets would enable a major improvement in the selection of products in which Jamaica has a comparative advantage. These analyses and information on production conditions would provide the bases for recommending the relatively few enterprises in which farmers should specialize. In time, these analyses should aid in the further shift from subsistence to commercial agriculture and should moderate the view that Jamaica should produce practically all the food it consumes. This view now often finds expression in import controls and other governmental regulations.

2. Establishment of an organization to give systematic and continuing direction to marketing improvement.

Specifically, this organization should aim at: (1) Providing a stable and continuing outlet for produce of marketable quality, the production of which is economically justified; (2) reducing marketing costs; (3) coordinating its marketing efforts with those concerning production. No doubt the organization would require modest governmental financial assistance in the beginning, and it should be organized so as to have the flexibility necessary to conduct commercial operations effectively.

As indicated earlier, the present marketing system is not prepared to purchase all output in some seasons, even when profitable export or other markets may exist. It is not supplying the growing market of hotels and other buyers of premium produce (perhaps about 10 percent of the total market at present), with the result that much of this supply is imported. The marketing system is not consistently serving the low income market as effectively as it might. As a result, outlets for many locally grown products are not as large as they might be, and a persistent and widely expressed view among farmers is that they would not be able to sell additional production.

A well-directed organization should be able to bring about a greater degree of price stability through better use of storage, domestic nutritional programs, and perhaps processing. Primarily it might help through the development of export markets for a few additional products.

Adoption of a grading program (including the necessary enabling legislation) and reflection of quality differentials in prices paid to farmers should enhance prospects of meeting a larger part of the growing domestic demand for certain foods from Jamaican production. This should result in economic benefits to farmers without additional costs to consumers.

The proposed organization should be able to reduce the costs of marketing through development of large-scale operations, selective installation of new equipment, introduction of a wide variety of well-known practices such as the use of plastic liners in storage containers and proper ripening practices for bananas. The assignment of much greater responsibility to employees could reduce labor use per unit of product. It is not unusual, for example, for several employees to accompany a delivery truck, one to ascertain quantity, one to handle payments, one to drive, and others to do the necessary physical handling.

This organization should be able to aid in a better coordination of production with prospective markets through such means as contract production. As a means of more quickly developing a satisfactory volume, it also might interest a few estate operators in production of selected commodities.

3. Expanding the research program.

Modest increases in research and statistical programs relating to marketing would aid greatly. These should yield improved basic data and evaluations of specific marketing alternatives, programs, and prospects; and better current information for such purposes as establishing a market intelligence service.

4. Consolidating governmental activities.

General advantages of economy and consistency would be expected from consolidation of governmental activities pertaining to agriculture.

If adopted, how significant would the foregoing be in improving the output and efficiency of Jamaican agriculture and in accomplishing related benefits concerning employment, income, and foreign exchange balances? Economic incentives are more meaningful to a commercial agriculture than to an agriculture still bearing a strong imprint of subsistence farming. This is particularly so of a subsistence agriculture that has lost social status and in which many operators have exceedingly sparse resources. Nevertheless, the operators of these farms are, economic men who will respond to a changing economic environment as they will to their increased political freedom. However, they probably will not permit economics or politics to affect their daily living as much now as perhaps will be true a generation hence.

ADVERTISING EXPENDITURES BY FOOD MARKETING CORPORATIONS, 1950, 1951, AND 1953-61^{1/}

This report presents annual data for 1950, 1951, and 1953-61 on advertising dollars spent by food manufacturing, wholesaling, and retailing corporations, and through 1959 for specific food manufacturing industries. Information concerning advertising expenditures by food manufacturing, wholesaling, and retailing corporations (1947-51 and 1953-56) was published originally in the January 1960 issue of this Situation. Data on advertising expenditures of specific food manufacturing industries (1947-51 and 1953-57) were presented in the July 1960 issue.

Total advertising expenditures by food manufacturing and wholesaling corporations show a continued upward trend (table 13), but the proportions accounted for by manufacturing and wholesaling continue to fluctuate. Manufacturers' expenditures for advertising fell from a high of 78 percent of the total in 1950 to 73 in 1957; then rose to 76 in 1959. They are estimated to have declined to about 75 percent in 1960 and 1961. The wholesaling sector accounted for 8 percent of the total in 1959, compared with 12 percent in 1951 and is estimated to have dropped to about 7 percent in 1960 and 1961.

Table 13.--Expenditures for advertising food and kindred products by manufacturing, wholesaling, and retailing corporations, 1950-51 and 1953-61

Year	Type of firm				Percentage of total expenditures			
	Manu- factur- ing	Whole- saling	Retail- ing	Total	Manu- factur- ing	Whole- saling	Retail- ing	Total
	Million dollars	Million dollars	Million dollars	Million dollars	Percent	Percent	Percent	Percent
1950	435.1	64.8	60.2	560.1	78	11	11	100
1951	470.1	70.3	69.1	609.5	77	12	11	100
^{1/} 1953	558.4	78.5	91.7	728.6	77	11	12	100
1954	610.9	78.8	106.4	796.1	77	10	13	100
1955	688.3	75.3	135.7	899.3	77	8	15	100
1956	724.0	84.8	167.4	976.2	74	9	17	100
1957	758.9	95.4	183.4	1,037.7	73	9	18	100
1958	782.6	95.4	184.6	1,062.6	74	9	17	100
1959	917.5	88.9	194.7	1,201.1	76	8	16	100
1960 ^{2/}	907.2	85.0	221.8	1,214.0	75	7	18	100
1961 ^{2/}	1,088.2	101.9	266.7	1,456.8	75	7	18	100

^{1/} Data for 1952 are not available.

^{2/} Figures for 1960 and 1961 are preliminary estimates.

Table 14.--Advertising expenditures by corporations manufacturing food and kindred products, by industry group, 1950-51 and 1953-59 ^{1/}

Industry group	1950	1951	1953	1954	1955	1956	1957	1958	1959
	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.
Bakery products.....	56.9	62.8	72.8	75.4	92.2	97.5	111.1	111.4	121.3
Canning--fruits, vegetables, and seafoods.....	57.1	64.7	80.4	91.3	106.9	110.9	112.4	128.9	145.4
Confectionery.....	34.2	38.8	39.6	42.5	46.7	48.3	54.2	60.7	67.8
Dairy products.....	54.3	65.3	70.9	80.3	87.0	91.5	78.1	124.3	136.0
Cereal preparations ^{2/}	25.3	28.3	18.7	20.1	22.0	25.6	26.0	--	--
Grain mill products ^{3/}	23.3	25.0	36.8	36.3	39.9	33.4	31.0	77.8	134.5
Meat products.....	51.5	50.0	61.5	72.7	75.3	86.5	88.5	72.1	80.3
Sugar.....	2.5	2.9	2.9	2.9	3.5	3.8	4.2	5.1	5.0
Food and kindred products not allocable.....	69.2	63.6	83.7	87.9	102.6	104.8	115.2	119.9	128.9
Other food and kindred products....	60.8	68.7	91.1	101.5	112.2	121.7	138.2	82.4	98.3
Total.....	435.1	470.1	558.4	610.9	688.3	724.0	758.9	782.6	917.5

^{1/} Based on data from the Internal Revenue Service Source Book. Data for 1952 are not available. Data for 1958 and later years reflect important changes in classification. Dairy corporations previously classified in Retail or Wholesale Trade or Trade Not Allocable were transferred into the proper manufacturing classification, if they had even a small degree of processing in their operations. Thus, 2,277 dairy companies were transferred from trade to dairy manufacturing in 1958. Within the manufacturing industry group, classification changes affected to a lesser magnitude the baking, cereal preparations, and grain mill products industries.

^{2/} Cereal preparations included in grain mill products in 1958 and 1959. Cereal preparations represented about 25 percent of the total before the adjustment for animal feed.

^{3/} Excludes animal feed.

In contrast, expenditures by retailing corporations increased steadily, rising from 11 percent of total advertising expenditures by food marketing corporations in 1950 to an estimated 18 percent in 1961. Changes in food advertising expenditures at retail reflect simultaneous changes in the numbers and size of corporations retailing food. The actual number of corporations retailing food increased by about 6,000 from 1950 to 1959. ^{2/} In 1948 corporations accounted for about 40 percent of the total retail food sales and by 1958 they accounted for 54 percent. ^{3/} These figures also reflect an increased emphasis of advertising at the retail level. There is evidence that this upward trend will continue. If the number of these stores in suburban areas increases substantially

relative to density of population, more extensive retail advertising may be anticipated.

Most food manufacturing industries more than doubled their expenditures for advertising in 1950-59 (table 14). Of particular note are increases by the bakery products, canned fruits, vegetables and seafoods, and dairy products industries. In each of these industries, there has been an increasing adoption of advertising, especially in metropolitan areas.

There is little likelihood that total food advertising expenditures will lessen. Data available do not enable any estimate of the extent of effectiveness of these expenditures in accomplishing objectives.

^{2/} Internal Revenue Service.

^{3/} U. S. Bureau of the Census, Census of Business.

Table 15.- Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, April-June 1962 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket 3/			1065.56	---	---	403.48	662.08	38
Meat products			277.72	---	---	144.27	133.45	52
Dairy products			198.41	---	---	85.82	112.59	43
Poultry and eggs		Average quantities purchased per urban wage-earner and clerical-worker family in 1952	80.53	---	---	46.73	33.80	58
Bakery and cereal products	Farm produce equivalent to products bought by urban families		169.98	---	---	31.52	138.46	19
All ingredients			---	26.87	2.49	24.38	---	14
Grain			250.21	---	---	76.10	174.11	30
All fruits and vegetables			155.73	---	---	56.31	99.42	36
Fresh fruits and vegetables			79.16	---	---	26.99	52.17	34
Fresh vegetables			94.48	---	---	19.79	74.69	21
Processed fruits and vegetables			43.80	---	---	11.80	32.00	27
Fats and oils			44.91	---	---	7.23	37.68	16
Miscellaneous products				Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.25 lb. Choice grade cattle	Pound	80.5	54.6	4.8	49.8	30.7	62
Lamb (Choice grade)	2.36 lb. lamb	Pound	70.6	41.9	6.5	35.4	35.2	50
Pork (retail cuts)	2.13 lb. hogs	Pound	57.8	34.2	4.4	29.8	28.0	52
Butter	Cream and whole milk	Pound	75.0	---	---	54.1	20.9	72
Cheese, American process	Milk for American cheese	1/2 pound	36.3	---	---	14.2	22.1	39
Ice cream	Cream and milk	1/2 gallon	85.9	---	---	4/22.4	63.5	26
Milk, evaporated	Milk for evaporating	14-1/2 ounce can	15.6	---	---	6.1	9.5	39
Milk, fluid	Wholesale fluid milk	Quart	24.9	---	---	10.4	14.5	42
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	39.9	---	---	19.8	20.1	50
Eggs	1.03 doz.	Dozen	47.2	---	---	30.4	16.8	64
Bread, white								
All ingredients	Wheat and other ingredients	Pound	21.1	---	---	3.2	17.9	15
Wheat	.882 lb. wheat	Pound	---	2.9	.2	2.7	---	13
Crackers, soda	1.38 lb. wheat	Pound	31.0	4.5	.4	4.1	26.9	13
Corn flakes	1.57 lb. white corn	12 ounces	26.9	3.4	.8	2.6	24.3	10
Corn meal	1.34 lb. white corn	Pound	14.0	2.9	.3	2.6	11.4	19
Flour, white	6.9 lb. wheat	5 pounds	56.7	22.6	2.0	20.6	36.1	36
Rolls, oats	2.31 lb. oats	18 ounces	23.6	4.8	.7	4.1	19.5	17
Apples	1.08 lb. apples	Pound	18.0	---	---	6.7	11.3	37
Grapefruit	1.04 grapefruit	Each	13.0	---	---	2.1	10.9	16
Lemons	1.04 lb. lemons	Pound	19.2	---	---	4.4	14.8	23
Oranges	1.04 doz. oranges	Dozen	77.3	---	---	20.4	56.9	26
Beans, green	1.09 lb. snap beans	Pound	30.6	---	---	12.5	18.1	41
Cabbage	1.10 lb. cabbage	Pound	14.6	---	---	4.8	9.8	33
Carrots	1.06 lb. carrots	Pound	15.4	---	---	5.4	10.0	35
Celery	1.11 lb. celery	Pound	17.4	---	---	6.6	10.8	38
Lettuce	1.41 lb. lettuce	Head	21.0	---	---	6.7	14.3	32
Onions	1.06 lb. onions	Pound	13.8	---	---	4.8	9.0	35
Potatoes	10.42 lb. potatoes	10 pounds	65.7	---	---	20.1	45.6	31
Sweetpotatoes	1.12 lb. sweetpotatoes	Pound	17.3	---	---	7.4	9.9	43
Tomatoes	1.13 lb. tomatoes	Pound	33.6	---	---	11.6	22.0	35
Orange juice, canned	5.83 lb. Fla. oranges for canning	46 ounce can	42.7	---	---	13.1	29.6	31
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	33.0	---	---	6.4	26.6	19
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.9	---	---	2.2	12.7	15
Corn, canned	2.49 lb. sweet corn	No. 303 can	20.0	---	---	2.3	17.7	12
Peas, canned	.69 lb. peas for canning	No. 303 can	22.4	---	---	2.9	19.5	13
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.8	---	---	2.7	13.1	17
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	20.7	---	---	8.2	12.5	40
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.2	---	---	6.0	21.2	22
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.7	---	---	4.2	18.5	19
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.9	---	---	3.1	17.8	15
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.3	---	---	6.4	10.9	37
Dried prunes	.97 lb. dried prunes	Pound	41.4	---	---	16.1	25.3	39
Margarine, colored	Soybeans, cottonseed, and milk	Pound	28.7	---	---	7.4	21.3	26
Peanut butter	1.77 lb. peanuts	Pound	57.4	---	---	20.9	36.5	36
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	38.3	---	---	6.5	31.8	17
Vegetable shortening	Soybeans and cottonseed	3 pounds	91.0	---	---	26.5	64.5	29
Corn sirup	1.90 lb. corn	24 ounces	27.3	3.5	.7	2.8	24.5	10
Sugar	38.16 lb. sugar beets	5 pounds	58.3	20.8	1.0	5/19.8	5/38.5	5/34

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Market basket total may differ slightly from sum of product group totals because of rounding of averages.

4/ Farm value of cream and milk only.

5/ Net farm value adjusted for Government payments to producer was 24.2 cents, farm-retail spread adjusted for Government processor tax was 35.8 cents and farmer's share of retail cost based on adjusted farm value was 42 percent.

Table 16.- Farm food products: Retail cost and farm value, April-June 1962, January-March 1962, April-June 1961, and 1947-49 average 1/

Product 2/	Retail unit	Retail cost						Net farm value 3/					
		Apr.-June 1962		Jan.-Mar. 1962		Apr.-June 1961		Apr.-June 1962		Jan.-Mar. 1962		Apr.-June 1961	
		1947-49 average		1947-49 average		1947-49 average		1947-49 average		1947-49 average		1947-49 average	
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Dollars	Dollars	Dollars	Dollars	Percent	Percent
Market basket 5/		1,055.56	1,052.02	1,052.43	940.09	6/	6/	403.48	4/413.78	399.77	466.02	-2	1
Meat products		277.72	278.09	276.22	256.08	6/	1	144.27	4/148.03	136.34	170.90	-3	6
Dairy products		198.41	202.65	200.38	169.28	-2	-1	85.82	4/90.44	87.64	91.66	-2	-2
Poultry and eggs	Average quantities purchased	80.53	89.52	82.96	117.01	-10	-3	46.73	54.23	48.66	80.69	-14	-4
Bakery and cereal products	per urban wage-earner and clerical-worker family in 1952	169.98	169.56	167.73	121.96	6/	1	31.52	4/30.78	29.38	34.97	2	7
All ingredients		---	---	---	---	---	---	24.38	23.02	21.24	24.96	6	15
Grain		250.21	233.51	246.35	184.68	7	2	76.10	4/70.57	75.98	60.93	8	6/
All fruits and vegetables		155.73	137.35	148.19	103.91	13	5	56.31	49.97	53.60	42.91	13	5
Fresh fruits and vegetables		79.16	71.37	70.99	53.17	11	12	26.99	23.83	22.01	22.97	13	23
Fresh vegetables		94.48	96.16	98.16	---	-2	-4	19.79	4/20.60	22.37	---	-4	-12
Processed fruits and vegetables		43.80	43.81	43.82	52.21	6/	6/	11.80	12.58	14.64	19.84	-6	-19
Fats and oils		44.91	44.89	44.97	38.87	6/	6/	7.23	4/7.15	7.13	7.03	1	1
Miscellaneous products													
		Cents	Cents	Cents	Cents	Percent	Percent	Cents	Cents	Cents	Cents	Percent	Percent
Beef (Choice grade)	Pound	80.5	80.6	79.1	68.5	6/	2	49.8	4/50.8	44.8	48.5	-2	11
Lamb (Choice grade)	Pound	70.6	67.4	64.6	63.9	5	9	35.4	32.2	32.5	44.2	10	9
Pork (retail cuts)	Pound	57.8	57.9	58.3	59.4	6/	-1	29.8	30.7	30.3	39.7	-3	-2
Butter	Pound	75.0	76.1	76.3	79.4	-1	-2	54.1	4/55.8	54.3	59.3	-3	6/
Cheese, American process	1/2 pound	35.3	36.3	36.4	29.8	0	6/	14.2	15.1	15.0	16.0	-6	-5
Ice cream	1/2 gallon	85.9	86.3	85.6	---	6/	-1	7/22.4	4/7/23.5	7/23.1	---	-5	-3
Milk, evaporated	14 1/2 ounce can	15.6	15.8	15.9	13.7	-1	-2	6.1	6.5	6.6	7.1	-6	-8
Milk, fluid	Quart	24.9	25.6	25.1	20.1	-3	-1	10.4	11.0	10.5	10.6	-5	-1
Chickens, frying, ready-to-cook	Pound	39.9	41.9	38.9	---	-5	3	19.8	22.3	19.0	---	-11	4
Eggs	Dozen	47.2	54.7	50.6	66.7	-14	-7	30.4	35.9	33.1	48.0	-15	-8
Bread, white													
All ingredients	Pound	21.1	21.1	20.9	13.5	0	1	3.2	3.1	2.9	3.3	3	10
Wheat	Pound	---	---	---	---	---	---	2.7	2.5	2.3	2.7	8	17
Crackers, soda	Pound	31.0	30.9	29.1	---	6/	7	4.1	3.9	3.5	---	5	17
Corn flakes	12 ounces	26.9	26.9	26.1	17.1	0	3	2.6	2.7	2.5	3.2	-4	4
Corn meal	Pound	14.0	13.6	13.2	11.8	3	6	2.6	2.8	2.6	3.6	-7	0
Flour, white	5 pounds	56.7	56.5	55.3	48.4	6/	1	20.6	19.2	17.8	21.0	7	16
Rollod oats	18 ounces	23.6	22.9	22.4	14.5	3	5	4.1	4.0	3.7	4.9	3	11
Apples	Pound	18.0	14.3	19.6	11.9	26	-8	6.7	5.5	7.6	4.4	22	-12
Grapefruit	Each	13.0	12.2	12.0	8.5	7	8	2.1	1.9	1.7	1.4	11	24
Lemons	Pound	19.2	19.4	19.9	17.7	-1	-4	4.4	4.6	4.9	5.7	-4	-10
Oranges	Dozen	77.3	76.9	78.6	46.6	1	-2	20.4	24.7	28.5	12.6	-17	-28
Beans, green	Pound	30.6	28.2	25.3	21.1	9	21	12.5	10.7	10.1	9.3	17	24
Cabbage	Pound	14.6	11.2	9.3	6.9	30	57	4.8	3.9	2.4	1.9	23	100
Carrots	Pound	15.4	15.0	16.7	11.1	3	-8	5.4	3.6	5.2	4.0	50	4
Celery	Pound	17.4	15.6	13.1	---	12	33	6.6	6.2	3.8	---	6	74
Lettuce	Head	21.0	18.3	16.1	14.5	15	30	6.7	6.9	4.6	6.3	-3	46
Onions	Pound	13.8	13.6	10.3	8.4	1	34	4.8	6.1	3.8	3.7	-21	26
Potatoes	10 pounds	65.7	56.6	66.2	51.9	16	-1	20.1	12.0	17.9	25.6	68	12
Sweetpotatoes	Pound	17.3	15.5	17.4	11.6	12	-1	7.4	6.1	7.3	4.8	21	1
Tomatoes	Pound	33.6	32.4	31.9	---	4	5	11.6	13.5	10.2	---	-14	14
Orange juice, canned	46 ounce can	42.7	46.0	48.7	---	-7	-12	13.1	14.2	19.2	---	-8	-32
Peaches, canned	No. 2-1/2 can	33.0	32.7	33.6	31.5	1	-2	6.4	4/6.4	5.3	5.3	0	21
Beans with pork, canned	16 ounce can	14.9	14.9	14.9	---	0	0	2.2	2.2	2.1	---	0	5
Corn, canned	No. 303 can	20.0	20.1	20.7	16.7	6/	-3	2.3	2.3	2.3	2.7	0	0
Peas, canned	No. 303 can	22.4	22.3	22.0	21.4	6/	2	2.9	2.9	3.0	3.0	0	-3
Tomatoes, canned	No. 303 can	15.8	15.8	16.1	14.2	0	-2	2.7	2.7	2.4	2.6	0	13
Orange juice concentrate, frozen	6 ounce can	20.7	23.1	25.2	---	-10	-18	8.2	10.2	11.5	---	-20	-29
Strawberries, frozen	10 ounces	27.2	27.1	26.9	---	6/	1	6.0	6.0	7.3	---	0	-18
Beans, green, frozen	9 ounces	22.7	22.8	23.1	---	6/	-2	4.2	4.2	4.4	---	0	-5
Peas, frozen	10 ounces	20.9	20.7	21.0	---	1	6/	3.1	3.1	2.9	---	0	7
Dried beans (navy)	Pound	17.3	17.3	16.8	19.9	0	3	6.4	6.1	6.0	9.7	5	7
Dried prunes	Pound	41.4	41.6	41.6	23.1	6/	6/	16.1	16.1	19.0	8.8	0	-15
Margarine, colored	Pound	28.7	28.9	28.8	39.7	-1	6/	7.4	8.0	9.9	12.2	-7	-25
Peanut butter	Pound	57.4	56.7	55.9	---	1	3	20.9	20.5	19.5	---	2	7
Salad dressing	Pint	38.3	38.4	37.2	37.8	6/	3	6.5	7.0	7.9	10.0	-7	-18
Vegetable shortening	3 pounds	91.0	90.9	91.3	105.6	6/	6/	26.5	28.7	34.9	46.2	-8	-24
Corn sirup	24 ounces	27.3	27.2	27.0	---	6/	1	2.8	2.5	2.7	---	12	4
Sugar	5 pounds	58.3	58.3	59.2	48.4	0	-2	19.8	4/19.8	19.8	19.4	0	0

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

4/ Most farm value figures for April-June 1961 have been revised; figures in other columns revised as indicated.

5/ Sum of product groups may differ slightly from market basket total because of rounding of averages.

6/ Less than 0.5 percent.

7/ Farm value of cream and milk only.

Table 17 - Farm food products: Farm-retail spread and farmer's share of the retail cost, April-June 1962, January-March 1962, April-June 1961, and 1947-49 average 1/

Product 2/	Retail unit	Farm-retail spread 3/				Farmer's share					
		Apr. - June 1962	Jan. - March 1962	Apr. - June 1961	1947-49 average	Percentage change from -		Apr. - June 1962	Jan. - March 1962	Apr. - June 1961	1947-49 average
						Jan. - Mar. 1962	Apr. - June 1961				
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Percent	Percent	Percent	Percent
Market basket 2/		662.08	648.24	662.66	474.07	2	6/	38	39	38	50
Meat products		133.45	130.06	139.88	85.18	3	-5	52	53	49	67
Dairy products		112.59	112.21	112.74	77.62	6/	6/	43	4/45	44	54
Poultry and eggs	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	33.80	35.29	34.30	36.32	-4	-1	58	61	59	69
Bakery and cereal products		138.46	138.78	138.35	86.99	6/	6/	19	18	18	29
All ingredients		---	---	---	---	---	---	14	14	13	20
Grain		174.11	162.94	170.37	123.75	7	2	30	30	31	33
All fruits and vegetables		99.42	87.38	94.59	61.00	14	5	36	35	36	41
Fresh fruits and vegetables		52.17	47.54	48.98	30.20	10	7	34	33	31	43
Fresh vegetables		74.69	75.56	75.79	---	-1	-1	21	21	23	---
Processed fruits and vegetables		32.00	31.23	29.18	32.37	2	10	27	29	4/33	38
Fats and oils		37.68	37.74	37.84	31.84	6/	6/	16	16	16	18
Miscellaneous products											
		Cents	Cents	Cents	Cents	Percent	Percent	Percent	Percent	Percent	Percent
Beef (Choice grade)	Pound	30.7	29.8	34.3	20.0	3	-10	62	4/63	4/57	71
Lamb (Choice grade)	Pound	35.2	35.2	32.1	19.7	0	10	50	4/48	4/50	69
Pork (retail cuts)	Pound	28.0	27.2	28.0	19.7	3	0	52	53	52	67
Butter	Pound	20.9	20.3	22.0	20.1	3	-5	72	4/73	4/71	75
Cheese, American process	1/2 pound	22.1	21.2	21.4	13.8	4	3	39	4/42	4/41	54
Ice cream	1/2 gallon	63.5	62.8	63.5	---	1	0	26	27	27	---
Milk, evaporated	14 1/2 ounce can	9.5	9.3	9.3	6.6	2	2	39	41	42	52
Milk, fluid	Quart	14.5	14.6	14.6	9.5	-1	-1	42	43	42	53
Chickens, frying, ready-to-cook	Pound	20.1	19.6	19.9	---	3	1	50	53	4/49	---
Eggs	Dozen	16.8	18.8	17.5	18.7	-11	-4	64	66	65	72
Bread, white											
All ingredients	Pound	17.9	18.0	18.0	10.2	-1	-1	15	15	14	24
Wheat	Pound	---	---	---	---	---	---	13	12	11	20
Crackers, soda	Pound	26.9	27.0	25.6	---	6/	5	13	13	12	---
Corn flakes	12 ounces	24.3	24.2	23.6	13.9	6/	3	10	10	10	19
Corn meal	Pound	11.4	10.8	10.6	8.2	6	8	19	21	20	31
Flour, white	5 pounds	36.1	37.3	38.5	27.4	-3	-6	35	34	32	43
Rolls, oats	18 ounces	19.5	18.9	18.7	9.6	3	4	17	17	17	34
Apples	Pound	11.3	8.8	12.0	7.5	28	-6	37	38	39	37
Grapefruit	Each	10.9	10.3	10.3	7.1	6	6	16	16	14	16
Lemons	Pound	14.8	14.8	15.0	12.0	0	-1	23	24	25	32
Oranges	Dozen	56.9	52.2	50.1	34.0	9	14	26	32	36	27
Beans, green	Pound	18.1	17.5	15.2	11.8	3	19	41	38	40	44
Cabbage	Pound	9.8	7.3	6.9	5.0	34	42	33	35	26	28
Carrots	Pound	10.0	11.4	11.5	7.1	-12	-13	35	24	31	36
Celery	Pound	10.8	9.4	9.3	---	15	16	38	40	29	---
Lettuce	Head	14.3	11.4	11.5	8.2	25	24	32	38	29	43
Onions	Pound	9.0	7.5	6.5	4.7	20	38	35	45	37	44
Potatoes	10 pounds	45.6	44.6	48.3	26.3	2	-6	31	21	4/27	49
Sweetpotatoes	Pound	9.9	9.4	10.1	6.8	5	-2	43	39	4/42	41
Tomatoes	Pound	22.0	18.9	21.7	---	16	1	35	42	32	---
Orange juice, canned	46 ounce can	29.6	31.8	29.5	---	-7	6/	31	31	39	---
Peaches, canned	No. 2-1/2 can	26.6	26.3	28.3	26.2	1	-6	19	4/20	16	17
Beans with pork, canned	16 ounce can	12.7	12.7	12.8	---	0	-1	15	15	14	---
Corn, canned	No. 303 can	17.7	17.8	18.4	14.0	-1	-4	12	11	11	16
Peas, canned	No. 303 can	19.5	19.4	19.0	18.4	1	3	13	13	14	14
Tomatoes, canned	No. 303 can	13.1	13.1	13.7	11.6	0	-4	17	17	15	18
Orange juice concentrate, frozen	6 ounce can	12.5	12.9	13.7	---	-3	-9	40	44	46	---
Strawberries, frozen	10 ounces	21.2	21.1	19.6	---	6/	8	22	22	4/27	---
Beans, green, frozen	9 ounces	18.5	18.6	18.7	---	-1	-1	19	18	19	---
Peas, frozen	10 ounces	17.8	17.6	18.1	---	1	-2	15	15	14	---
Dried beans (navy)	Pound	10.9	11.2	10.8	10.2	-3	1	37	35	36	49
Dried prunes	Pound	25.3	25.5	22.6	14.3	-1	12	39	39	4/46	38
Margarine, colored	Pound	21.3	20.9	18.9	27.5	2	13	26	28	4/34	31
Peanut butter	Pound	36.5	36.2	36.4	---	1	6/	35	36	35	---
Salad dressing	Pint	31.8	31.4	29.3	27.8	1	9	17	18	4/21	26
Vegetable shortening	3 pounds	64.5	62.2	56.4	59.4	4	14	29	32	4/38	44
Corn sirup	24 ounces	24.5	24.7	24.3	---	-1	1	10	9	10	---
Sugar	5 pounds	38.5	38.5	39.4	29.0	0	-2	34	34	4/33	40

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ The farm-retail spread is the difference between the retail cost and the net farm value, table on opposite page:

4/ Most farm-retail spread figures for January-March 1962, and April-June 1961 have been revised; figures in other columns revised as indicated.

5/ Sum of product groups may differ slightly from market basket total because of rounding of averages.

6/ Less than 0.5 percent.

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